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ABSTRACT

A project was designed to provide students of isolated rural school areas with a microcomputer system that includes career education, prevocational, and vocational experiences. The system was to be incorporated into the Kansas Computerized Career Information System. The specific objectives of the project were (1) to develop a secondary-level program of career awareness and values, self-concept, work attitudes, decision making, and prevocational skills for a microcomputer program; (2) to develop and implement a secondary-level program of career exploration, job opportunities, job interviews, and life planning simulations for a microcomputer delivery system for secondary schools; (3) to implement the above-mentioned programs in three junior high schools in three Kansas school districts in 1981-1982; and (4) to design a program to provide students in isolated areas with basic knowledge about microcomputers. Five microcomputer programs were developed on the following topics: banking, career exploration, finding a job, job interviews, and job opportunities. Most of the 251 students who evaluated the program were highly satisfied with the educational content, presentation, ease of use, and interest level of the programs. While three of the four project objectives were accomplished successfully, accomplishment of the third is dependent upon future funding. (MN)

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ED221650

1980-81

Final Report
of
Special Vocational Project
by
Lawrence USD #497
on

DEVELOPMENT OF STRATEGIES FOR IMPLEMENTING MICROCOMPUTER CAREER EDUCATION AND VOCATIONAL DELIVERY SYSTEMS FOR ISOLATED SCHOOL AREAS

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CE 030 650

DEVELOPMENT OF STRATEGIES FOR IMPLEMENTING MICROCOMPUTER CAREER EDUCATION AND VOCATIONAL DELIVERY SYSTEMS FOR ISOLATED SCHOOL AREAS

Introduction

In 1980, the Vocational Education Administration Section of the State Department of Education funded a project with U.S.D. #497, Lawrence, to develop a grades seven through twelve microcomputer delivery system of career education for students. Pilot sites for the project, in addition to Lawrence High School and South Junior High School, were McLouth High School and Wabaunsee High School. The various project activities focussed on developing and implementing a secondary level program of career exploration, job opportunities, job interview, and life planning simulations. The project was intended to enhance the use of the Kansas computerized career information system currently being developed for secondary level students, especially those attending schools in an isolated area of the state.

Background of the Project

In Kansas there are many schools isolated in rural areas which can not provide adequate vocational education and career exploratory programs. The term "adequate" is used for four primary reasons.

1. Lack of adequate access. Today, the majority of Kansas rural high school students have access to some type of career or vocational education experience. Two basic delivery systems are common. Students in large consolidated, comprehensive rural high schools generally receive vocational

instruction right in these institutions. Students in smaller schools seeking career and vocational training commute full or part-time either to a comprehensive high school or, more often, to a specifically-designated area vocational-technical school.

Still, access remains a problem. In very remote or isolated rural areas, there are students who want and could profit from career and vocational education curricula. However, the programs offered are often severely limited in terms of the range of available offerings. Frequently, there are only two or three existing program areas, and the course coverage even in these areas tends to be superficial. Thus, while access to some kind of career and vocational education exists, it is not necessarily access to the type or level of training needed.

It also must be pointed out that there is an enormous difference between access in theory and access in reality. Often, area vocational-technical schools will include a very large geographic area in their official description of their constituency; but the population they actually serve tends to be a much smaller group clustered in reasonably close physical proximity to the area vocational-technical school. For the more remote rural students, simply getting to and from these area vocational-technical schools can be an arduous, expensive, and time-consuming endeavor. These hardships discourage all but the most tenacious rural students from completing career or vocational training activities. As a rule the more rural or geographically isolated a student is, the less real access he/she has to meaningful career and vocational education program.

2. Lack of adequate funding. One of the major stumbling blocks to providing high quality career and vocational education programs and alleviating

access-related problems, as discussed in #1, has been and continues to be financial. For example, vocational education training, primarily because of the extraordinary capital expenditures required, has been an expensive venture everywhere. But in rural isolated areas, the general problems of low enrollment and low per-pupil wealth combine to make urban-style comprehensive vocational education programs financially inaccessible. After all, it is very difficult for a rural community which can barely afford to provide children with a basic education to justify asking the state to help in spending $50,000 for the equipment and materials needed in one vocational program area which will enroll only five students per year.

These rural diseconomies exist. The most common alternative--busing students to area vocational-technical schools--is anything but cheap in view of the high costs of transportation. Given rising energy costs, this solution may soon be prohibitively expensive.

3. Absence of adequate supporting institutions. Unlike their urban and surburban counterparts, the rural schools have to "go it alone." The network of postsecondary institutions, state and federal youth training and employment programs, and private proprietary schools which exist in every metropolitan area is rarely present in rural communities. This means that the full burden of aiding rural youth in the transition from school to work falls upon schools and school programs which are ill-equipped to cope with career and vocational demands.

In other words, if the school doesn't provide something, chances are it simply will not be provided. There are a few rural equivalents of the youth training programs offered by the Urban League or the YMCA. Similarly, efforts to foster rural work experience or apprenticeship programs are crippled by the fact that there are so few businesses, organizations, and

institutions in rural communities where students could even potentially be placed.

4. Lack of adequate programs. Outdated and irrelevant programming is the most pervasive problem in rural career and vocational education today. In the past quarter-century, rural Kansas has been subjected to a rash of major changes, including the use of agri-buinsess, which substituted capital for labor in farm enterprises and the closing of thousands of small farms. These changes have radically altered both the structure of the rural labor force and, consequently, the operative demands for rural manpower. Yet vocational agriculture programs have often expanded even in the force of these adverse farm employment trends. There is no doubt that vocational agriculture deserves continuing strong support in rural areas. However, serious problems arise when vocational agriculture and home economics are the dominate, and occasionally the sole, career and vocational opportunity offered to rural students. Continuing to offer a particular kind of training because that is where the jobs used to be, or simply because that training has always been offered, does a serious injustice to rural students.

To alleviate these problems of rural schools, two of them--McLouth and Wabaunsee--requested the Lawrence schools to help them. Lawrence, which has a long history of career education and vocational education curricula (See Appendix A), agreed to develop a system designed to provide career exploration, job opportunities, job interview, and life planning simulations for the microcomputer. Since most schools can afford to acquire a microcomputer rather than a comprehensive vocational program, the microcomputer was chosen as the vehicle to get this information to students in the isolated rural areas.

Basically, the microcomputer is structured the same as the largest computer. It is physically smaller, slower, has less memory, but still can be a very powerful tool. However, the capacity and speed of a moderately sized micro is greater than all but the most powerful computers of two decades ago; and the price is but a fraction of the earlier models. Microcomputers range in size from about 8,000 to 64,000 characters of memory, which may be augmented by tape and disk peripheral storage. The cost of these systems varies from $800 to $20,000.

Nowhere is the potential and, to some extent, the realization of the capability of microcomputing greater than in the field of education. The cost of a microcomputer system is within the reach of most school districts. Microcomputers presently are being used by many schools in support of instruction through such applications as drill and practice, simulation, tutorials, testing, computer management of individualized instruction, and information retrieval.

Recognizing the career and vocational need of the isolated rural schools and the increasing availability of microcomputers, U.S.D. #497 requested funding for a grant to accomplish the following:

1. To develop a 7-12 microcomputer delivering system for a program of career awareness and values, self-concept development, work attitudes, decision making, and pre-vocational skills for future implementation in pilot sites in 1981-82.
2. To develop and implement a secondary level program of career exploration, job opportunities, job interview, and life planning simulations for a microcomputer delivery system and to provide some microcomputer experiences to students in isolated areas.

Design of the Project

The project was designed to provide students of isolated rural school areas with a microcomputer system which included career education, pre-vocational, and vocational experiences. The system was to be developed for incorporation into the Kansas Computerized Career Information System. The four specific objectives of the project were as follows:

1. To develop a 7-12 program of career awareness and values, self-concept, work attitudes, decision making and pre-vocational skills for a microcomputer program for secondary schools.
2. To develop and implement a secondary level program of career exploration, job opportunities, job interview and life planning simulations for a microcomputer delivery system for secondary school which would increase the effectiveness of the Kansas Computerized Information System which is currently in the planning and pilot implementation stage.
3. To implement the microcomputer career education and vocational programs (as described above) in 3 junior high schools in 3 Kansas school districts in 1981-82.
4. To provide students in isolated areas with an opportunity to acquire some microcomputer knowledge which would assist them with their transition from school settings into our increasingly computerized world of work.

To meet these objectives, the project staff--director, programmer/staff trainer, secretary, and resource teachers from pilot and implementation sites--and the advisory council completed the following activities:

1. Conducted a nationwide search to locate potential low cost microcomputer career education, pre-vocational, and vocational programs which are currently used and adaptable to Kansas. The search of ERIC, CIJE, Autocon, Computer Assisted Guidance, Career Information System, Counseling Information System, Computer Assisted Career Exploration System, Computerized Career Information Service, Computerized Heuristic Occupational Information and Career Exploration System, Computer-Assisted Occupation Guidance, Computerized Vocational Information System, Discover, Education and Career Exploration System, System of Interactive Guidance and Information, Total Guidance Information Support System, Milwaukee Computerized Vocational Guidance System, Learning What World, and Rochester Career Guidance identified projects and programs, their strategies, and outcomes which were acceptable for use in this project. A report of the programs reviewed is available in the Lawrence Career Education Center.
2. Appointed and convened every two months, the Project Advisory Council provided recommendations, encouraged collaborative efforts between schools involved in the project, assisted with dissemination of information, and developed positive school and community relations. This council had representatives from counselors, students, parents, administrators, and community members. A list of the council members and their schedule of meetings are in Appendix C.
3. Planned, developed, and held twelve staff development sessions for five hundred teachers at Lawrence, McLouth, Wabaunsee, Dodge City, Mankato, and Topeka. The sessions included training the

participants to program materials on the microcomputer and to use the microcomputer in vocational and career situations. The participants in these development sessions also reviewed the disks listed in #4.

4. Wrote, developed, and programmed for the microcomputer five programs which were applicable for grades 7-12. Copies of the text of these program disks are in Appendix B. They are as follows:
   (A) "How to Get a Job"
   (B) "Job Opportunities"
   (C) "Life Planning Simulations - Banking"
   (D) "Career Explorations"
   (E) "Job Simulations"
5. Tested and revised the microcomputer disks of the five programs identified in #4. Teachers and students at Lawrence, McLouth, and Wabaunsee reviewed the disks on the microcomputer and identified problems and concerns with the content and presentation of the disks. A total of 1,250 students used the five programs and completed a rating form. These identified problems were eliminated from the disks by reprogramming. A copy of the review form is in Appendix D.
6. Designed and wrote a mini-page booklet on how to use the microcomputer entitled "Your First Date With A Microcomputer: the Radio Shack (TRS-80) and Apple Models." The booklet was disseminated to staff of the Lawrence Schools. Appendix E contains a copy of the booklet.
7. Designed and developed two assessment instruments to determine the opinion and reaction of students and teachers to the microcomputer

program disks. One instrument was used to revise the disks; and the other, to evaluate the text and program. Copies of these instruments are provided in the section on results in this report.

8. Evaluated the microcomputer program disks. A sample of 25 percent of the staff and students of schools in Lawrence, McLouth, and Wabaunsee or 251 students, completed evaluation forms (See form in Appendix F) on the final disks of the five programs. Outcome of these evaluation forms is discussed in the following section of the report.

Results of the Project

The Development and Implementation of Strategies for Implementing Microcomputer Career Education and Vocational Curriculum Delivery Systems for Isolated School Areas Project met three of the four objectives agreed upon with the State Department of Education within the time allotted--September 15, 1980, through June 30, 1981. Evaluation of the project is presented individually by objective.

(1)

"To develop a 7-12 program of career awareness and values, self-concept, work attitudes, decision making, and pre-vocational skills for a microcomputer program for secondary schools."

Five microcomputer programs on the topics of banking, career exploration, how to get a job, job interviews, and job opportunities were developed, evaluated, and delivered to the State Department of Education for dissemination. Each program disk includes graphics, can be used on the Apple microcomputer--the most commonly used microcomputer in the Kansas classroom--and is programmed to test and keep score of the students' responses. The content of the disks addresses students in the range of the seventh through

twelfth grades. However, a readability formula needs to be run on the narrative of the disks to determine the exact grade level of the material to assist teachers in using the disks on individual assignment.

Within the project's time frame, at least one microcomputer program, and sometimes all five programs, were written, programmed, reviewed, revised, and evaluated per topic of the objective:

Topic	Program
Career Awareness and Values	Program 4 "Career Exploration"
	Program 5 "Job Simulations"
Self-Concept	Program 1 "How to Get a Job"
	Program 5 "Job Simulations"
Work Attitudes	Program 1 "How to Get a Job"
	Program 2 "Job Opportunity"
	Program 5 "Job Simulations"
Decision Making	Program 1 "How to Get a Job"
	Program 2 "Job Opportunity"
	Program 3 "Banking"
	Program 4 "Career Exploration"
	Program 5 "Job Simulations"
Pre-vocational Skills	Program 3 "Banking"
	Program 4 "Career Explorations"
	Program 5 "Job Simulations"

(2)

"To develop and implement a secondary level program of career exploration, job opportunities, job interview, and life planning simulations for a microcomputer delivery system for secondary schools which would increase the effectiveness of the Kansas Computerized Career Information System which is currently in the planning and pilot implementation stage."

The microcomputer programs which were developed for the project are compatible with the Computerized Career Information System which is currently being developed. They are ready for adaption into the system as follows: career exploration--Program 4 "Career Exploration;" job opportunities--Program 2 "Job Opportunity," Program 5 "Job Simulation," and Program 1 "How to Get a Job;" job interview--Program 1 "How to Get a Job;" and life simulation--Program 3 "Banking" and Program 4 "Career Exploration."

The five microcomputer programs which were the results of these two objectives were evaluated by 251 secondary students at Lawrence, McLouth, and Wabaunsee to assess their opinion to the program disks and the microcomputer. Many of these students in McLouth and Wabaunsee had never used a microcomputer before, whereas many of the Lawrence students were quite familiar with it. The evaluation instrument contained eight questions related to the individual programs. The answers to the questions were attitude-scaled, similar to a Likert scale. Although A - E were used, numerical values were substituted, A = 5, B = 4, etc. in the analysis of the data. A summary of the evaluation data is at the end of this section of the report.

Of the five programs, Program 3 - "Banking" and Program 5 - "Job Simulation" received the highest percent of positive responses indicating the microcomputer programs were interesting or very interesting. Program 4 - "Career Exploration" received the lowest percent of "very interesting"

Overall, the 72 percent, or 180 students, found the microcomputer disks "very interesting" and "interesting."

Program 4 - "Career Exploration" apparently is the easiest microcomputer program to use, according to the respondents, and Program 5 - "Job Simulation" was a close second. The only program to get a negative response concerning ease of use was Program 1 - "How to Get a Job;" which received 2 percent of the 51 students who evaluated it. Overall, the five programs were considered "easy to use" by 91 percent of the 251 respondents.

The students selected Program 3 - "Banking" and Program 5 - "Job Simulation" as having much educational content and value. Program 4 - "Career Exploration," again received the lowest score of the five programs. The highest score for presentation of material, or program polish, went to Program 5 - "Job Simulation" and Program 2 - "Job Opportunity;" and the lowest score, to Program 4 - "Career Exploration." Only two of the 251 respondents gave a negative score to the questions involving content and presentation.

Whereas Program 4 - "Career Exploration" received the lowest scores on the content and presentation, it and Program 5 - "Job Simulation" received the highest scores for the use of graphics with Program 3 - "Banking" moving to last place. None of these three programs were scored negatively by the students.

For providing clear instructions on how to use the programs, Program 5 "Job Simulation" and Program 3 - "Banking" had the highest mean scores of 4.74 and 4.60 respectively. Coming in last again was Program 4 - "Career Exploration" with a mean of 4.32. The mean for all the programs was a 4.52.

In responding to Statement 7, "Program responds differently for good students and poor students," the majority of students responded on all

programs with a "C," or #3. However, the validity and meaning of this statement is questionable; but the scores were included in the results to indicate that all the data collected had been analyzed.

The final statement of the evaluation instrument was to indicate the overall value of the microcomputer disks: "Should every school have this disk to use with its students to inform them about the various topics?" The programs receiving the highest scores were "Job Simulation," and "Banking"--those which received high scores continually throughout the evaluation. For all the programs, only one received a score on the negative side of the attitude scale, Program 2 - "Job Opportunity." Of the 251 respondents, 86 felt very strongly about the value of the microcomputer programs in the school curriculum.

Overall evaluation of the five programs indicates a very high appreciation of the educational content, presentation, ease of use, and interest. Since the 251 students who evaluated the programs were a composition of novice and experienced users of the microcomputer, the high scores do not imply the Hawthorne effect--a bias in the subjective judgement of the individuals who participate in the evaluation. The data supports the positive responses as genuine.

(3)

To implement the microcomputer career education and vocational programs (as described in objective #2) in three junior high schools in three school districts in Kansas in 1981-82.

Completion of this objective was dependent on funding for the second year of the project. The microcomputer disks and booklet for using the microcomputer are ready for demonstration and dissemination in other school districts. If the project is not refunded, the microcomputer disks could easily fit into the Kansas Computerized Career Information System and be acquired from the State Department of Education.

(4)
"To provide students in isolated areas with an opportunity to acquire some microcomputer knowledge which would assist them with their transition from school settings into our increasingly computerized world of work."

The design, program, review, and evaluation of the microcomputer disks were done in school districts with enrollment as follows:

USD	Students	Certificated Employees
Lawrence	6,847	463
Wabaunsee	574	54
McLouth	510	38

Lawrence, as indicated earlier, has a history of career and vocational education instruction. Agreeing to assist the smaller districts, Lawrence designed and programmed the microcomputer disks from its own experiences in providing career and vocational education. The disks were then reviewed by students and teachers from all three districts. Following a reprogramming to eliminate problems discovered by the review, the disks were used by McLouth, and Wabaunsee schools as well as the Mankato school district in western Kansas, which provides instruction for 325 students with 29 teachers and administrators.

All of these locations, except Lawrence, would be considered in isolated rural areas. Only Mankato and Lawrence had any experience with microcomputers before the project. The microcomputer disks were well received, evaluated, as previously noted, and provided knowledge about the microcomputer, banking, career exploration, job interest, job opportunity, and how to get a job to the student.

In summary the three specific objectives which could be accomplished within the funding and time lines of the project were completed. The

fourth objective which was written to continue the project into the second year was understandably not attempted. The project served a valuable function in developing and implementing a secondary level program of career exploration, job opportunities, job interview, and life planning simulation for students attending schools in an isolated area of the state.

SUMMARY OF EVALUATION OF FIVE MICROCOMPUTER PROGRAMS
N=251

QUESTION		RESPONSE Numbers					Percent					
1. Level of Interest: A = very interesting E = uninteresting		A	B	C	D	E	A %	B %	C %	D %	E %	Mean
Program 1 = How to Get a Job	N = 51	16	20	14	1	0	31	39	27	2	0	4.00
Program 2 = Job Opportunity	N = 50	15	22	11	2	0	30	44	22	4	0	4.00
Program 3 = Banking	N = 50	20	19	11	0	0	40	38	22	0	0	4.18
Program 4 = Career Exploration	N = 50	10	21	19	0	0	20	42	38	0	0	3.82
Program 5 = Job Simulation	N = 50	17	20	12	1	0	34	40	24	2	0	4.06
Total on all Programs	N = 251	78	102	67	4	0	31	41	27	2	0	4.01
2. Ease of Use: A - easy to use E = awkward		A	B	C	D	E	A %	B %	C %	D %	E %	Mean
Program 1 = How to Get a Job	N = 51	32	10	8	1	0	63	20	16	2	0	4.43
Program 2 = Job Opportunity	N = 50	30	16	4	0	0	60	32	8	0	0	4.52
Program 3 = Banking	N = 50	37	6	7	0	0	74	12	14	0	0	4.60
Program 4 = Career Exploration	N = 50	33	17	0	0	0	66	34	0	0	0	4.66
Program 5 = Job Simulation	N = 50	40	9	1	0	0	80	18	2	0	0	4.78
Total on all Program	N = 251	172	58	20	1	0	68	23	8	4	0	4.60

QUESTION		RESPONSE Numbers					RESPONSE Percent					
3. Educational Content/Value: A = Much E = Little		A	B	C	D	E	A %	B %	C %	D %	E %	Mean
Program 1 = How to Get a Job	N = 51	21	22	7	1	0	41	43	14	2	0	4.24
Program 2 = Job Opportunity	N = 50	25	14	9	1	1	50	28	18	2	2	4.22
Program 3 = Banking	N = 50	31	16	3	0	0	62	32	6	0	0	4.56
Program 4 = Career Exploration	N = 50	11	25	13	1	0	22	50	26	2	0	3.92
Program 5 = Job Simulation	N = 50	28	18	4	0	0	56	36	8	0	0	4.48
Total on all Programs	N = 251	116	95	36	3	1	46	38	14	1	.4	4.28
4. Program Polish: A = well done E = sloppy/incomplete		A	B	C	D	E	A %	B %	C %	D %	E %	Mean
Program 1 = How to Get a Job	N = 51	18	24	7	2	0	35	47	14	4	0	4.14
Program 2 = Job Opportunity	N = 50	26	18	6	0	0	52	36	12	0	0	4.40
Program 3 = Banking	N = 50	27	15	8	0	0	54	30	16	0	0	4.38
Program 4 = Career Exploration	N = 50	17	21	11	0	1	34	42	22	0	2	4.06
Program 5 = Job Simulation	N = 50	30	16	4	0	0	60	32	8	0	0	4.52
Total on all Programs	N = 251	118	94	36	2	1	47	37	14	.8	.4	4.30

QUESTION		RESPONSE Numbers					Percent					
5. Instructions: A = very clear E = none		A	B	C	D	E	A %	B %	C %	D %	E %	Mean
Program 1 = How to Get a Job	N = 51	31	15	4	1	0	61	29	8	2	0	4.49
Program 2 = Job Opportunity	N = 50	28	17	4	1	0	56	34	8	2	0	4.44
Program 3 = Banking	N = 50	35	10	5	0	0	70	20	10	0	0	4.60
Program 4 = Career Exploration	N = 50	23	20	7	0	0	46	40	14	0	0	4.32
Program 5 = Job Simulation	N = 50	39	9	2	0	0	78	18	4	0	0	4.74
Total on all Programs	N = 251	156	71	22	2	0	62	28	9	.8	0	4.52
6. Use of Graphics: A = excellent E = none		A	B	C	D	E	A %	B %	C %	D %	E %	Mean
Program 1 = How to Get a Job	N = 51	19	20	11	1	0	37	39	22	2	0	4.12
Program 2 = Job Opportunity	N = 50	28	14	7	1	0	56	28	14	2	0	4.38
Program 3 = Banking	N = 50	20	17	13	0	0	40	34	26	0	0	4.14
Program 4 = Career Exploration	N = 50	28	14	8	0	0	56	28	16	0	0	4.40
Program 5 = Job Simulation	N = 50	30	16	4	0	0	60	32	8	0	0	4.52
Total on all Programs	N = 251	125	81	43	2	0	50	32	17	.8	0	4.31

QUESTION		RESPONSE Numbers					RESPONSE Percent					
7. Program responds differently: A = a great deal E = no difference		A	B	C	D	E	A %	B %	C %	D %	E %	Mean
Program 1 = How to Get a Job	N = 51	11	10	12	4	14	22	20	24	8	27	3.00
Program 2 = Job Opportunity	N = 50	10	7	22	7	4	20	14	44	14	8	3.24
Program 3 = Banking	N = 50	10	9	13	8	10	20	18	26	16	20	3.02
Program 4 = Career Exploration	N = 50	4	14	20	6	6	8	28	40	12	12	3.08
Program 5 = Job Simulation	N = 50	17	11	13	1	8	34	22	26	2	16	3.56
Total on all Programs	N = 251	52	51	80	26	42	21	20	32	10	17	3.18
8. Overall Value: A = every school should have program B = not worth the effort		A	B	C	D	E	A %	B %	C %	D %	E %	Mean
Program 1 = How to Get a Job	N = 51	22	23	6	0	0	43	45	12	0	0	4.31
Program 2 = Job Opportunity	N = 50	22	16	11	1	0	44	32	22	2	0	4.18
Program 3 = Banking	N = 50	30	14	6	0	0	60	28	12	0	0	4.48
Program 4 = Career Exploration	N = 50	23	18	9	0	0	46	36	18	0	0	4.28
Program 5 = Job Simulation	N = 50	28	19	3	0	0	56	38	6	0	0	4.50
Total on all Programs	N = 251	125	90	35	1	0	50	36	14	.4	0	4.35

APPENDIX A

Kansas State Department of Education

Kansas State Education Building

120 East 10th Street Topeka, Kansas 66612

September 5, 1980

Dr. Linda M. Suderman
Administration Center
USD #497
2017 Louisiana
Lawrence, KS 66044

RE: "Development of Strategies for Implementing Microcomputer Career Education and Vocational Delivery Systems for Isolated School Areas," State Reference No.: 81-132-20

Dear Dr. Suderman:

The above-captioned special project has been approved for funding in the amount of $45,790.00 federal and $6,165.00 local for the year September 15, 1980, through June 30, 1981. Because we are able to approve a project on only an annual basis, we are lining out the words "first budget for two-year project" that have been inserted on the "Vocational Education Special Projects Proposal Grant Application" form.

We encourage you to communicate with Dr. Willard Dempsey at Parsons Senior High School to avoid duplication of efforts.

We look forward to working with you on this worthwhile project, Linda.

Sincerely,

Alyce L. Williamson

Alyce L. Williamson, Ph.D.
Research Coordinating Unit

ALW/cd/10

An Equal Employment/Educational Opportunity Agency

Form #0-03-03-Ve-70

State Reference Number: _____ 1980-81
(state use only)

VOCATIONAL EDUCATION SPECIAL PROJECTS

Proposal Grant Application

Submitted to the Vocational Education Administration Section, Kansas State Department of Education, under the provisions of Title II, Vocational Education Amendments of 1976.

Applicant Institution/Agency: U.S.D. 497, Lawrence

Street Address: 2017 Louisiana

City: _____, Kansas _____ County _____
(Zip code)

Activity I.D. 132-S

Project Title: Development of Strategies for Implementing Microcomputer Career Education & Vocational Delivery Systems for Isolated School Areas.

Project Director: (name and telephone number:

Dr. Linda Suderman (913) 842-6222 Ext. 294

Budget Request: Federal $ 45,790 Local $ 6,165

Beginning September 15, 1980, and ending July 15, 1981.

(First budget for 2 year project)

Carl L Knopf, Superintendent of Schools 9/2/80
Signature of Institution Representative by R. L. Taylor Date

Linda M Suderman
Signature of Project Director Date

////////////////////////////////// STATE USE ONLY //////////////////////////////////

New _____ Existing _____, number of year _____

This project proposal is approved, disapproved for funding under Section _____

in the amount of (Federal) $ _____ (Local) _____.

Vocational Education Program Specialist

DISTRIBUTION: Vocational Education Administration 28

Submitted by: KANSAS

ABSTRACT

State Reference No. 132 B

Project Title: Development and Implementation of Strategies for Implementing Microcomputer Career Education and Vocational Curriculum Delivery Systems for Isolated School Areas

Project Director: Linda Suderman, PhD. Telephone Number (913) 842-6222 Ext. 294

Institution/Agency: USD 497

2017 Louisiana Street Address, Lawrence City, Kansas 66044 zip code

Beginning Date: August 15, 1980 Ending Date June 30, 1981.

OBJECTIVES:

1. To develop a 7-12 microcomputer delivery system for a program of career awareness and values, self-concept development, work attitudes, decision-making and pre-vocational skills for future implementation in pilot sites in 1981-82.
2. To develop and implement a secondary level program of career exploration, job opportunities, job interview and life planning simulations for a microcomputer delivery system and to provide some microcomputer experiences to students in isolated areas.

PROCEDURES:

The project will progress through the following stages of development and implementation: 1) planning, 2) data gathering, 3) initial development and evaluation, 4) development and tryout, 5) evaluation of microcomputer programs and revisions, and 6) implementation and evaluation of junior high (1981-82) and 7) future dissemination, depending on future funding by KSDE (Spring 1982)

EXPECTED IMPACT ON VOCATIONAL EDUCATION:

1. The project will enhance the students' career education, pre-vocational and vocational experiences through this microcomputer delivery system and make such experiences more readily available to students in isolated areas.

2. This project will provice more vocationally-oriented microcomputer experiences to secondary students, so that more realistic career expectations and decisions may be made towards taking junior and senior high vocational courses.

PROJECTED FINAL OUTCOME:

The microcomputer programs from this project should enhance the effective use of the Kansas computerized career information system currently being developed for the secondary level student, and allow students in isolated school areas to have some microcomputer experiences before entering the world of work.

STATE USE ONLY

Section 132: $ Local $ FY

Section 133: $ Local $ FY

Other: $ Local $ FY

1. Need For This Assistance: Describe the need to which this proposal is being addressed. Include "number of persons to be served" and "target population".

The needs which this project is designed to serve are as follows:

1. In Kansas and Lawrence there is a need to establish a delivery system which utilizes microcomputers in career education and vocational experiences.

2. In Kansas schools which are isolated, there is a need for a career education and vocational delivery system utilizing readily transferable microcomputer technology since many small, rural school districts are acquiring microcomputers.

3. Many isolated rural schools in Kansas such as Alma and McLouth are currently requesting consulting assistance from Lawrence's Career Education Program which has been on-going since 1970-71. Lawrence's years of experience in career education and vocational curriculum (7-12) could be made individually adaptable to each local school's and local community's employment needs as indicated in the KSDE assessment through microcomputer learning center units.

See pg 2A for the descriptions of the development and implementation pilot sites.

2. Objective: (list specific objectives)

The objectives of this project are listed as follows:

1. To develop a 7-12 program of career awareness and values, self-concept, work attitudes, decision-making and pre-vocational skills for a microcomputer program for secondary schools.

2. To develop and implement a secondary level program of career exploration, job opportunities, job interview and life planning simulations for a microcomputer delivery system for secondary schools which would increase the effectiveness of the Kansas Computerized Career Information System which is currently in the planning and pilot implementation stage.

3. To implement the microcomputer career education and vocational programs (as described above) in 3 junior high schools in 3 Kansas school districts in 1981-82.

4. To provide students in isolated areas with an opportunity to acquire some microcomputer knowledge which would assist them with their transition from school settings into our increasingly computerized world of work.

PROJECT DEVELOPMENT AND IMPLEMENTATION:

Description	1979-80 Enrollment	Staff
A. Four Pilot Development Sites		
One Junior High: (Career & Pre-Vocational Exploration)		
1. South Junior High (7th) The junior high in USD #497 with the largest number of students bused from 2½ miles or more (230 of 614 students). A large percentage of the rural area junior high students in USD #497 attend this facility.	614	41
Three Senior High Schools		
1. Lawrence High School (10-12) This senior high has students from the entire Lawrence community area. It has approximately 10% minority populations including Black, Native Americans, Spanish Americans and others as well as foreign students.	1772	119
In 1976-77 this senior high school was chosen to have its staff write the exemplary career education guides for Kansas. In addition, it has a Career Center and an active career education program which includes activities such as the Annual Career Fair Day, the Foreign Language Department's Career Seminar Day, and bi-monthly career seminar speakers. School and community joint projects called Adopt-A-School projects have been begun by many LHS teachers. LHS also has the following vocational programs: Industrial Arts and Home Economics, Office Education, Distributive Education, Cooperative Industrial Training and Medical Careers and related clubs. As an exemplary senior high school for career education and vocational programs, this senior high should be included.		
The following two senior highs have expressed an interest in this microcomputer career education and vocational project and also indicated their willingness to serve as implementation sites during 1980-81:		
2. Alma H.S. (USD #329) - ninth to twelfth grades	217	20
3. McLouth H.S. (USD #342) - seventh to twelfth grades McLouth H.S. uses a trisemester plan.	265	~~18~~ 22

3. Describe the statewide impact and significance of the program:

After completing one year of implementation of the microcomputer career education and vocational and pre-vocational programs at each level (senior high and junior high), the project staff and/or resource staff would be able to conduct orientation sessions for interested districts on a statewide basis if requested and funded by KSDE to do so. In addition, these programs will be designed to increase the usage of the planned computerized career information and job description data system currently being designed for microcomputers in two years.

4. Describe the procedure and general design of the program:

The project staff and participants will include the following:
Project Director - Consultant
Projector Director - Programmer/Staff Trainer
Project Secretary and Assistant Programmer
Resource staff and teachers from pilot and implementation sites
Project Advisory Council
Project pilot and implementation sites students
Community resource persons and employers

The following is an outline of the proposed project's stages and estimated time schedule for the first year of pilot and implementation sites' involvement in the project.

I. Planning Stage — Estimated Time Schedule - September & October, 1980

A. Project staff interviewed and selected
B. Project microcomputer equipment and software specifications determined, bids circulated to vendors and final selections made
C. Lawrence schools' career education, pre-vocational and vocational programs identified in pilot sites and resource staff and teachers recruited and oriented to the project.

D. The first organizational meeting of the Project Advisory Council will be held. This council will consist of at least two or more staff and/or parents and/or community resource persons from each of the participating school districts. Additional meetings of the council will be held as deemed necessary during the project.

II. Data Gathering Stage — Estimated Time Schedule - November & December 1980

A. The project staff will conduct a nationwide search to locate potential low cost microcomputer career education, pre-vocational and vocational programs which are currently in use and might be adaptable to Kansas and this project's objectives.

7. Statewide dissemination of the final product: (if not applicable, write N/A)

Dependent upon the successful completion of this microcomputer career education pilot project, (5 pre-vocational and vocational programs), we intend to recommend that the KSDE make future funding available for statewide dissemination using this project as a dimension of a statewide microcomputer career education model. We would anticipate presenting this project at state meetings of such organizations as KPGA and KVGA etc.

III. Initial Development and Evaluation Stage — ETS - January & February 1981

A. Staff development sessions will be held by the Projector Director - Programmer/Trainer for pilot and implementation sites' staff

B. The Projector Director - Programmer/Trainer in conjunction with the pilot site staff and resource persons will identify quality career education, pre-vocational and vocational experiences which would be adaptable to the microcomputer delivery system.

IV. Development and Tryout State — ETS - March & April 1981

A. Microcomputer programs will be written for grade 7-12. (A minimum of 5 programs)

B. Microcomputer programs will be tested for teacher and student responses in pilot sites in Lawrence.

C. Microcomputer programs will be revised and tested by staff and students in implementation sites

V. Evaluation of Microcomputer Programs and Revisions — ETS - June & July 30, 1981

A. Criterion referenced instruments of evaluation will be identified and /or developed by the Projector Director - Programmer/Trainer in conjunction with all other staff and resource persons.

B. A sampling of 25% of the staff and students utilizing the microcompter programs will be involved in the evaluation process

C. Final revisions and retesting

VI. Anticipated Implementation and Evaluation of Junior High Programs in 1981-82, Depending on Future Funding.

VII. Dessemination of Senior High Programs in Spring of 1982.

5. Describe the procedure for evaluation of the project:

See evaluation statements in #4 on pages 3 and 3A

6. Time Schedule:

See Estimated Time Schedules on #4 on pages 3 and 3A

VOCATIONAL EDUCATION SPECIAL PROJECT ASSURANCES

Fiscal Year _____

U.S.D. 497

Applicant Institution/Agency _____

Special Project Title Development and Implementation of Strategies for Implementing Microcomputer Career Education and Vocational Curriculum Delivery Systems for Isolated School Areas

This Assurance page is to be completed and submitted by the Local Education Agency or other eligible recipient that has not completed Section I of the 1985 Vocational Education Program Application.

The Board of Education or legal governing body of this Local Education Agency or other eligible recipient assures the Kansas State Board of Education that such local board or governing body shall comply with the following and this information is on hand and will be available for evaluation by specialist, auditors, and administration upon request.

The Local Education Agency, and all vocational programs under its jurisdiction, assures the State Board that:

1. Program shall be developed in consultation with:
   a. Local representatives of available training resources; K A R 104.141 (f)(4)(A)(i), 104.532(b).
   b. Local Advisory Council; K A R 104.141(f)(4)(A)(ii).
   c. Other vocational program personnel within the district; K A R 104.141 (f)(4)(A)(i).
   d. Local personnel of CETA; Representative for your area; K A R 104.141 (f)(4)(C).
   e. Private, nonprofit school personnel; K A R 104.533(a).

2. In the funding of programs,
   a. Federal funds shall not supplant local funds; K A R 104.141(f)(5)(B)(ii)(6); and
   b. federal funds shall be used only for purposes specified in Public Law 94-482, K A R 104.141(f)(5)(B)(ii)(7).
   c. local maintenance of effort will not lessen greater than 5%. (If local maintenance of effort exceeds reduction 5%, justification for lessening must be submitted to the Director of Vocational Education Administration for approval before this program can be approved.) K A R 104.325, 104.330.
   d. federal funds shall not be commingled with State and local funds. P.L. 94-482, Secs. 122(a), 132(b), and 140(b)(2)(B).

3. All students shall have an occupational objective which is not considered professional or requiring a baccalaureate or higher degree, with the exception of pre-service and in-service projects. (Students in Consumer and Homemaking and exploratory programs such as broad-base industrial education and health exploratory are not required to have occupational objectives.) K A R 104.511(b).

4. Program will be coordinated with local CETA programs, K A R 104.[illegible].

5. A plan shall be on file locally describing how each Local Education Agency or other eligible recipient will meet the needs of:
   a. Disadvantaged persons; K A R 104.313(a)(1).
   b. Handicapped persons; K A R 104.317(a).
   c. Persons with limited English-speaking ability, K A R 104.313(b).
   d. Students enrolled in a cooperative agreement from a private non-profit school; K A R 104.533(b)(3).

6. Each program plan allows equal access to both male and female students. The SEX EQUITY PLAN OF ACTION further assures equal access by expanding occupational choices to all students. To comply with this Assurance, complete and return documents a & b with the VL-20, Section I. The forms are:
   a. NEEDS ASSESSMENT: SUMMARY OF ACTIVITIES FOR EXPANDING STUDENT OPTIONS: complete the Needs Assessment for each Local Education Agency or other eligible recipient. K A R 104.75(b).
   b. ACTION PLAN: List Sex-Fair Actions based on NEEDS ASSESSMENT for each local Education Agency or other eligible recipient, K A R 104.75(c).
   c. ACTION REPORT: report the results of the ACTION PLAN (one year later).

7. A current listing of each program's objectives and a course outline shall be on file locally; K A R 104.511-512.

8. A list of expenditures for each project shall be submitted on a quarterly basis on the Expenditure Justification Report (form VL-20-EJ) [illegible], K A R 104.[illegible]

9. Each program instructor(s) shall be vocationally certified in the area of program competency. KAR 91-19.

10. Programs shall be coordinated with other vocational programs in the area using non-federal dollars.

[illegible] Law 97-182 (October 12, 1982) [illegible] describe the relationship between vocational education programs proposed to be conducted [illegible] under this Act and other programs in the area or community which are supported by State and local funds, and that any eligible recipient dissatisfied with final action with respect to such relationship shall be given reasonable notice and opportunity for [illegible]

[illegible]

[illegible]

Vocational Education Special Projects

1980-81

	Federal	Local
A. Personnel		
Administration		
Project Director/Programmer, training (10 months) 1.0 FTE	$17,300	$ -
Secretarial/assist programming 1.0FTE (10 months	6,200	
Guidance/USD#497 Gifted Staff ($7.00 x 400 hrs)	2,800	5,100
Instruction		
B. Fringe Benefits	1,710	
Social Security (6.5%) x $26,300 Salaries		
C. Travel and Per Diem (Project Staff)		
Travel 4,000 miles x 19¢ mile	760	95
Per Diem 4 days x$32 per day	128	
D. Supplies and Materials (itemize) 240 SIV		
Office supplies - 350 Misc. Materials - 210	560	200
E. Communications (postage-telephone services)	400	150
Telephone & tolls - 200 Postage & National Search - 15¢/letter - 200		
F. Consultant Services:		
Fee: $100 per day for 3 days	300	-
Travel Cost: $160	160	-
Per Diem Cost: $32 x 2	64	-
G. Equipment: (specify lease)		
4 Micro computers (monitors, printer, accessories at $2,400 x 4	9,600	-
4 Software pacs at $300 x 4	1,200	-
Direct Cost: Total	$41,182	$ 5,545
H. Other (specify)		
Indirect Costs - 11.19% (80-81 rate) Other benefits	4,608	620
Includes Workers Comp., Unemployment Insurance, etc.		
TOTAL BUDGET	$45,790	$ 6.165

11. A local Advisory Council for vocational education programs shall be formed of the general public. This Local Advisory Council will be composed of representatives of local business, industry, labor, and targeted population. Minutes of the Local Advisory Council meetings will be on file locally for inspection and assurance compliance. Public Law 94-482 (October 12, 1976) Section 105(a)(1).

NOTE. This is a local Advisory Council, not an individual Program "Craft" Advisory Committee.

Local Advisory Council Members (attach additional sheets if necessary)	REPRESENTATION Check appropriate column, must include at least one each of the following			
	Business	Industry	Labor	Other (specify)
One single advisory council is not used instead input from the six councils listed below is solicited in many areas: Career Education Advisory Council - 15 members; Manufacturer's Council - 21 business persons & parents; Lawrence High Principals Advisory Council - 75 parents; Central Jr. High Advisory Council - 18 parents; South Jr. High Advisory Council - 25 parents; West Jr. High Advisory Council - 29 parents & 17 staff				

The Local Advisory Council must have an appropriate representation of both sexes and an appropriate representation of racial and ethnic minorities found in the program areas, schools, community, or region which the advisory council serves

	Male	Female
American Indian or Native Alaskan		
Asian or Pacific Islander		
Black, not of Hispanic origin		
Caucasian, not of Hispanic origin		
Hispanic (Spanish culture or origin)		

12. [illegible] will be evaluated locally each year and the evaluation be used in the further planning and updating of the [illegible]. (The Vocational Education Handbook provides guidelines for programs. These guidelines can be used as standards against which programs would be evaluated.)

a. Attach a separate sheet to these Assurances explaining method of evaluation; R & R 104.141(f)(4)(5)(i)
b. Attach a separate sheet to these Assurances explaining any changes made due to the findings of the evaluation, R & R 104.141(f)(4)(6)(ii).

13. Programs will provide, upon request, any records of assurance evidence which is required to be on file locally. Requests will be made on a rotation basis for a desk audit by the Vocational Education Administration Section. R & R 104.141(f)(9).

Pursuant to P.L. 94-482, Section 106(a)(3)(A)(ii), we hereby certify that evidence of compliance with these assurances is on file in the school and is available to the State Department of Education, Vocational Education Administration Section, upon request. It is also hereby certified that the development of such evidence was done in consultation with the Local Advisory Council.

Signature of Administrator of Local Education Agency. Carl L. Kemp by K. L. Taylor Date 9/30/80

LAWRENCE USD #497

SPECIAL VOCATIONAL PROJECT BUDGET

USES OF MICROCOMPUTERS IN ISOLATED RURAL SCHOOLS

		AMOUNT
210-S1V	Project Director/Programmer, training 1.0 FTE	$17,300
211-S1V	Secretarial/assist programming 1.0 FTE	6,200
212-S1V	USD #497 Counselors Gifted Staff & Others	2,800
240-S1V	Supplies and Materials	560
245-S1V	Communications(postage, telephone services)	400
248-S1V	Consultant Services: Fees, Travel & Per Diem	524
250-S1V	Travel and Per Diem(Project Staff)	888
840-S1V	Indirect Costs - 11.19%	4,608
845-S1V	Fringe Benefits-Social Security	1,710
950-S1V	Leased Equipment 4 Micro Computers & related	10,800
	TOTAL BUDGET	$45,790

9/4/80

CENTREX Audio Visual Systems, Inc.

210 S.W. SIXTH STREET TOPEKA, KANSAS 66603 TELEPHONE 913/232-7701

October 2, 1980

Mr. E. Coleman
USD 497
2017 Louisiana
Lawrence, Kansas 66044

Dear Mr. Coleman:

The following is a quote you requested on a micro-computer system with the prices based on a 10 month lease.

MASTER DEVELOPMENT SYSTEM

QUANTITY	DESCRIPTION	PER MONTH
1	Bell & Howell 48K Micro-Computer	$62.25
1	Disk II Drive For Above Unit With Interface Card	$24.78
1	Disk II Drive Without Interface Card	$20.95
1	IDS-440 Printer With Interface Card, Cable, 4K Buffer, & High Resolution Graphics Package	$60.38
1	Panasonic CT-1310 M Color Monitor	$20.95
1	Z-80 CP/M & Micro Soft Basic Card. Allows The Bell and Howell To Run Z-80 Baised Programs.	$14.77
1	Bell and Howell Graphic Tablet This Would Cut Programing Time By Allowing The Programer To Enter Graphic Inputs	$32.10
1	Bell and Howell Integer Card This Allows The Bell & Howell Computer To Run Both Applesoft And Integer Basic Programs.	$8.46
1	Bell and Howell Genis Software Program. A Software Package That Allows User To Develop Programs Without Using Basic	$12.70
1	Bell and Howell Modem II With Interface Card. The Computer Can Then Be Used As A Terminal.	$17.95
		$275.29
		X 10
		$2,752.90

AUDIO VISUAL SPECIALISTS • EQUIPMENT • SALES • RENTALS • REPAIR SERVICE

USER SYSTEMS

QUANTITY	DESCRIPTION	PER UNIT	TOTAL
3	Bell and Howell 48K Microcomputer	$62.25	$186.75
3	Bell and Howell Disk II With Interface Card	$24.78	$74.34
3	Bell and Howell Integer Card	$8.46	$25.38
3	Panasonic CT-1310M Color Monitors	$20.95	$62.85
			$349.32
			x 10
			$3,493.2

If you have any questions, please feel free to contact me.

Sincerely,

CENTREX AUDIO VISUAL SYSTEMS, INC.

WILLIAM H. JONES
REPRESENTATIVE

WHJ/bj

Total for 4 units
Page 1 $2,752.90
Page 2 3,493.20
$6,246.10

Improvement in computer technology continues to make computers, minicomputers, and programmable calculators increasingly accessible to great numbers of students at reasonable costs.

A future goal of contemporary education is computer literacy. Every student needs to have firsthand experience with both the capabilities and the limitations of computers through contemporary applications.

Although the study of computers is intrinsically valuable, educators should also adopt an awareness of the advantages of computers in both interdisciplinary problem solving and as an instructional aid. Educational decision makers, including classroom teachers, should seek to make computers readily available as an integral part of the educational system.

Beyond an acquaintance with the role of computers in society, most students should obtain a working knowledge of how to use them, including the way in which one communicates with each and commands their services in problem solving.

With the increasing availability of microcomputers at decreasing costs, it is imperative that schools play an active part in preparing students of the 1980s to live in a world in which more and more functions are being performed by computers.

Recognizing this need, U.S.D. 497 has received funding for a grant to meet the following objectives:

1. To develop a 7-12 microcomputer delivery ststem for a program of career awareness and values, self-concept development, work attitudes, decision-making and pre-vocational skills for future implementation in pilot sites in 1981-82.

2. To develop and implement a secondary level program of career exploration, job opportunities, job interview and life planning simulations for a microcomputer delivery ststem and to provide some microcomputer experiences to students in isolated areas.

Pilot sites for this project are Lawrence High School and South Junior High, McLouth High School, and Wabaunsee High School.

If you are interested in this project or have questions please contact Dr. Linn Suderman, Lawrence Schools, Administration Center, Lawrence, Kansas 66044, Telephone (913) 842 6222.

OBJECTIVES

The objectives of this project are listed as follows:

1. To conduct a national search including general articles on computers in education, and career education innovations utilizing microcomputers.

2. To develop and implement senior high level (10-12) microcomputer programs on the topics of career exploration, job opportunities, job interview, life planning skills and job simulations for a microcomputer delivery system for secondary schools which would enhance the effectiveness of the Kansas Computerized Career Information System which is currently in the planning of pilot implementation stage. Definition of microcomputer program: a set of numbered instructions designed to perform a particular computer job run.

3. To develop and implement microcomputer career education and vocational programs on the topics of career awareness and values, self concept, work attitudes, decision making and pre-vocational skills for 2 junior highs in 1981 - 82, pending funding.

4. To provide students in isolated areas with an opportunity to acquire some microcomputer knowledge which would assist them with their transition from school settings to our increasingly computerized world of work.

APPENDIX B

Text of Microcomputer Programs

Presentation Disk

Exercise

Life Planning Simulations — Banking

T: The first step in banking is shopping for a bank
T: that is right for you. This involves more than selec-
T: ting the bank with the best gift for new depositors.
T: All full-service banks will offer their customers
T: the services of savings, checking, and borrowing;
T: but rates of interest, charge for services, and number
T: of services vary. Larger banks may offer free checking
T: accounts, bill paying service, credit cards, and
T: automatic withdrawal for savings when checking account
T: is overdrawn. Smaller banks may offer more personal
T: services such as knowing customers by name rather than
T: a number and taking time to counsel customers about
T: financial matters. You should also consider the
T: convenience of the bank's location and hours of operation
T: to your own schedule.
T: The following are descriptions of services that
T: three banks have to offer.

T: 1. City Bank has six month, $10,000 money market
T: certificates now paying 13.481% and thirty month,
T: $100 money market certificates paying 12.00%.
T: There is a substantial penalty for early with-
T: drawal. Regular savings accounts earn 5.50%.
T: The bank offers telephone paying service at a
T: cost of five cents a bill. A complete summary
T: of bills paid is sent to the customer at the
T: end of the month.
T: There is no charge for checking accounts if a
T: minimum balance of $1,000 is maintained. A
T: VISA card is given to all checking account
T: customers.
T: Savings accounts are insured to $100,000. The
T: bank presently has branches in five locations
T: and will soon open a sixth. All of the latest
T: technology is available to bank employees.
T: 2. Universal Bank is offering a free blanket with a
T: $250 deposit in a new or existing savings account.
T: With a $500 deposit, the customer can choose a
T: toaster or a coffee pot.
T: Ten thousand dollar money market certificates
T: earn 13.481% annually. However, interest is
T: placed into a passbook account which pays 5.25%,

T: making total yield on the certificates 14%.

T: There are three Universal Bank branches in the

T: downtown area. All are open from 9:00 a.m. to

T: 6:00 p.m. Monday - Friday.

T: 3. Community Bank in your neighborhood pays 5.50%

T: interest on passbook accounts. Groups or individ-

T: uals may make arrangements for a tour of the

T: facility and explanation of services. Bank hours

T: are from 9:00 a.m. to 4:00 p.m., Monday - Friday

T: and from 9:00 a.m. to 12:00 noon on Saturday.

T: The bank is federally insured. It charges a small

T: fee for checking accounts and allows three over-

T: drafts a year without charge.

Q: Choose the one which best fits the needs of a young

Q: customer who has just started a part-time job and wants

Q: to open a savings account.

A: N

M: "3" is the best answer. It pays a higher rate

M: of interest on passbook savings accounts than "2".

M: The higher rate of interest could soon be worth more

M: than the initial gifts; and few beginning savers will

M: have a sufficient amount of money to deposit to get

M: the gifts anyway. Bank "1" offers many services and

M: the same interest rate; but the personal attention and

M: advise given to depositors by most small banks may be
M: more important to youth, especially those only inter-
M: ested in savings accounts. A small neighborhood bank
M: might also be more convenient to persons with limited
M: or no transportation.

T: There are three main reasons for starting a savings
T: account. (1) Money in a savings account earns money
T: for you (through interest paid by the bank) while you
T: are saving for a particular item. (2) If you save
T: enough money to pay cash for the item, you save the
T: finance charges (amount of interest charged daily or
T: monthly on the unpaid balance of loan) of the bank or
T: merchant. Finance charges add considerably to the
T: purchase price of merchandise. (3) Savings accounts
T: help people out of emergencies. If your car breaks down
T: two weeks before payday or you find out that you can
T: have the job you've been wanting starting Monday, if
T: you bring your own tools, a savings account can be
T: a lifesaver.

T: Saving money is easy if you budget for your savings
T: account. Set aside 5%, 10%, or whatever you can afford
T: each payday for savings. Act as though the money is
T: going to pay a bill and do not spend it. At the
T: earliest opportunity, place it in your savings account.

Q: If your paycheck is $100 and you have budgeted
Q: 5% for savings, how much money will you deposit in
Q: your savings account?
A: N
M: $100 Salary
x .05 budgeted for savings (5% = .05)
$5.00 deposited in account
TY: Good. The answer is $5.00.
T: This is a form similar to the one you will be asked
T: to fill out when you start a savings account. Look
T: at it closely.
G: GRF
G: HLIN B C at D
G: VLIN E, F at G

G: Text

T: Each time you deposit money into your savings
T: account you will fill out one of these slips. It is
T: very important to check and double check the deposit
T: total to make sure that you will know exactly what
T: amount should be added to your passbook total. Even
T: bank employees make mistakes.
Q: Figure the total amount of deposit on the following
Q: deposit slip.

Currency		25.00
Coin		1.75
101	C	52.50
506	H	13.95
	E	
	C	
	K	
	S	
Total		
Less Cash Received		0.0
Net Deposit		?

M: The net deposit is $93.20.
TY: Good. The answer is $93.20.
T: Be sure to check the amount entered in your passbook
T: against the net deposit total on your deposit slip.

T: This is a picture of a page in a passbook. Notice
T: that a deposit has been made on the fifth of every
T: month and that interest is added quarterly.
G: GRF
G: HLIN B, C at D
G: VLIN E, F at G

Date	Deposit	Withdrawal	Interest	Balance
1-5-80	$25.00			25.00
2-5-80	30.00			55.00
3-5-80	25.00			80.00
3-15-80			1.00	81.00
4-5-80	35.00			116.00
5-5-80	25.00			141.00
6-5-80	25.00			166.00
6-15-80			2.07	168.07

G: Text
T: Interest on the savings was figured at a rate
T: of 5%. The process of figuring interest involves
T: three steps. (1) Change percent of interest to a decimal
T: fraction by moving the decimal point in the percent
T: two places to the left (5% = .05). (2) Multiply the
T: passbook balance by the interest rate. (3) Multiply
T: the amount obtained in number two by the length of
T: time in saving period. In other words, if interest is

T: paid quarterly, multiply by .25 because quarterly
T: is every 1/4 year. If Interest is paid biannually,
T: multiply by .50 because biannually is every 1/2 year.
T: (1/4 = .25 and 1/2 = .50).

T: Step 1 6% = .06

T: Step 2 $50 (balance)

x.06 (6% interest)

$3.00

Step 3 $3.00

x .25 (quarterly)

1500

600

$ .7500

Q: Figure amount of interest earned if your savings
Q: balance at the end of the quarter is $250 and you are
Q: earning 5% interest.

A: N

M: Step 1 5% = .05

M: Step 2 $250

x.05

$12.50

Step 3

$12.50

x .25

$3.1250

T: Once you start receiving a paycheck you may want to
T: open a checking account. A checking account will give
T: you a record of money transactions for income tax
T: and budgeting purposes. It will allow you to pay
T: obligations by mail at a cost which is much less than
T: a money order. A checking account will also make it
T: unnecessary for you to carry large sums of money which

T: might be lost or stolen. A cancelled check is a

T: receipt that can prove that you purchased an item or

T: paid a bill.

T: If you decide to open a checking account, you will be

T: asked to fill out a form similar to the following.

T: Look at it carefully.

G: GRF

G: HLIN B, C at D

G: VLIN E, F at G

G: Text

T: The bank will ask you to order checks for your account.
T: You will have many choices as to color of checks and
T: printed information on checks. Be sure to write your
T: name (as you plan to sign your checks), address, and
T: phone number clearly on the check order blank. You
T: may also want to have other information, such as drivers
T: license number or social security number, added to
T: the information printed on the checks. If so, place
T: this information under your name and address on the
T: order blank.
T: Mark the number of checks you wish to order on the
T: order blank. Quantities available and the charge for
T: each quantity are usually printed on the order blank.
T: If not, ask a bank employee about this information.
T: Consider your future plans when ordering your checks.
T: For instance, do not order 1,000 checks if you plan
T: to move or change your name within a month or two.
T: Estimate how many checks you will write per month
T: and then order a six-month or year supply.
T: The charge for checks will usually be taken from the
T: amount of money in your checking account. The amount
T: of the charge will be shown on your bank statement.
T: As soon as you receive your checks, make sure that

T: all information printed on them is accurate. If a
T: mistake has been made, send them back immediately and
T: ask for the necessary corrections to be made.
T: Use your check blanks in numerical order. Such usage
T: will make recordkeeping much easier for you. The last
T: packet of check blanks should have a reorder form on
T: it. If the information on the reorder form is accurate,
T: simply mark the number of checks needed. If any
T: information has changed, mark through inaccurate
T: information and write in corrected information.
T: Reorder checks as soon as you begin to use the last
T: packet of checks.
T: Writing checks is easy if you fill in the blanks
T: correctly. The date the check is written is on the
T: "date" line. The name of the person or organization
T: to be paid is on the "pay to" line (Be sure to fill in
T: this line. If you do not, anyone can write in a name
T: and cash the check). The amount of money to be paid
T: is entered in figures on the line next to the person
T: to be paid and in words on the following line. The
T: reason for the payment is written on the line next to
T: the word "for". The check is signed on the "signature"
T: line. Write it in cursive, using the same form of your
T: name that is printed at the top of the check. Always

T: write your check in ink, beginning words and numbers

T: as far to the left of each blank as possible. If you

T: do not, information on the check might be changed by

T: someone receiving the check.

G: GR

G: HLIN

G: HLIN B, C at D

G: VLIN E, F at G

Q: What is wrong with this check?

A: N

M: The day is not entered in the date.

M: The check writer has not started all the information to

M: the left of each blank.

M: The blank next to the word "for" should be filled out

M: so that the writer has a record of why he/she spent

M: the money.

M: The signature is printed.

M: The signature is not in the same form as the name
M: listed at the top of the check.
L: 5
TY: Great! You know what should be on a check.
L: 4
TY: Good! You named four of the five requirements on a
TY: check.
L: 3
TY: OK. You named three of the five requirements on a check.
L: 2
TY: Sorry. Look at the check again.
TY: Q5
T: If you make a mistake when writing a check, print the
T: word "VOID" in large letters across the front of the
T: check. Make sure to also write "VOID" on the check
T: stub for this particular check. The check is now no good.
T: A skill which you must have in order to write checks
T: correctly is the skill of writing numbers as words.
Q: Change the following numerals to number words: 1,001,
Q: 88, 35, 129, 67, 243, 56, 72, 91, and 54.
A: N
M: one thousand one, eighty-eight, thirty-five, one hundred
M: twenty-nine, sixty-seven, two hundred forty-three,
M: fifty-six, seventy-two, ninety-one, and fifty-four.

L: 10

TY: Excellent! You know your numerals and number words.

L: 9

TY: Great! You know your numerals and number words.

L: 8

TY: Good! You wrote eight of the ten correctly.

L: 7

TY: OK. You wrote seven of the ten correctly.

L: 6

TY: Sorry. Write them again.

TY: Q6

T: The following is a check stub. It will either be

T: attached to a check or in a separate booklet. It is

T: extremely important to record information from the

T: check on the check stub.

G: HLIN

G: HLIN B, C at D

G: VLIN E, F at G

Date: 1-10-80 Check No. 103 Written to: Bell Co.

Beginning Balance	$100.15
Amount of Check	7.50
Subtotal	92.65
Amount of Deposit	0
Ending Balance	92.65

T: The beginning balance of any check stub is the ending
T: balance from the previous check stub. The amount of
T: the check is subtracted from this balance and the
T: amount of any deposits is added. You must check your
T: arithmetic carefully for accuracy. If you make a
T: mistake, you may become overdrawn at the bank. (When
T: you are overdrawn, you have written checks for more
T: money than you have in the bank.) When this happens,
T: the bank sends checks it cannot pay to the stores or
T: persons to whom you wrote them. Both the bank and
T: store or individual can charge you as much as $5.00
T: for the inconvenience of having to call you and inform
T: you about the overdraft. If you consistently write
T: "hot checks" (checks written for which there is an
T: insufficient amount of money in the bank), you may be
T: placed in jail.
T: The "beginning balance" on check stub 101 is $53.20.
T: Use the following information to complete this check
T: stub and the additional check stubs and checks in the
T: packet for this activity.
T: Check 101 is written to Dillon's Grocery Store for
T: groceries in the amount of $25.00 on July 3, 1981.
T: Check 102 is written to the Campus Book Store for books
T: in the amount of $5.75 on July 11, 1981.

T: On July 15, 1981, a deposit of $75.00 is made to
T: your account.
T: Check 103 is written to Carl's Auto Parts for a fan
T: belt and other small items in the amount of $15.95
T: on August 3, 1981.
T: Check 104 is written to Joe's Pizza Palace for pizza
T: and drinks in the amount of $8.60 on August 5, 1981.
T: Check 105 is written to Miller's Clothing Store for
T: shoes and a sweater in the amount of $39.87 on August
T: 10, 1981.
Q: What is the ending balance?
A: N
M: $33.03
T: If the end balance is not $33.03, recheck your math.
T: Once each month the bank will send checking account
T: customers their cancelled checks (checks that have been
T: honored by the bank) and a bank statement. The bank
T: statement will contain the month's beginning balance,
T: the date and amount of each check paid by the bank,
T: the amount of service charges taken from the account,
T: the date and amount of all deposits, and the month's
T: ending balance.
T: Upon receiving the cancelled checks and bank statement,
T: you must reconcile your bank balance. This means that

T: you must make sure that your checking account records
T: agree with the bank's records. Bank reconciliation
T: is easy if you follow these steps.
T: Place all cancelled checks in numerical order and
T: put a check mark on each check stub for which you have
T: a cancelled check.
T: Make a list of the check number and amount of each
T: check stub which you did not mark as cancelled. These
T: checks are outstanding - that is, they have not yet
T: been received or paid by the bank. Add up the amounts
T: of all outstanding checks.
T: Subtract the total outstanding checks from the ending
T: balance on the bank statement.
T: Find the service charge on the bank statement. Subtract
T: this service charge from the ending balance on your
T: last check stub. This balance and the new balance you
T: found on the bank statement should now agree. If they
T: do not, you have made a mistake in the reconciliation
T: process or on one or more of your check stubs.
Q: What are the steps in reconciling your bank account?
A: N
M: Place all cancelled checks in numerical order and put a
M: check mark on each check stub.
M: Make a list of the check number and amount of each

M: check stub.

M: Subtract the total outstanding checks from the ending

M: balance on the bank statement.

M: Subtract the service charge from the ending balance

M: on the last check stub.

L: 4

TY: You need to know all 4 steps or you can make a mistake

TY: in reconciling your bank balance.

L: 3

TY: Reread the steps.

Q: 6

T: An individual may take out a loan from a number of

T: places. Credit unions and banks generally charge the

T: lowest rate of interest while loan sharks charge the

T: most. Before signing a contract for any loan, determine

T: exactly how much you will be paying in interest costs.

T: Add up all the monthly payments involved, then subtract

T: from this total the retail price of the item you bought

T: with the loan.

T: Monthly installment loan payments should not exceed 15

T: percent of your monthly take-home pay. Realistically

T: appraise your job and family situation before taking

T: on any additional debt, no matter how small.

T: If you have collateral, use it to get a loan. Generally

T: interest rates on secured loans (those backed by
T: collateral) are less than those given on a signature
T: alone. For the first few loans, you may be asked to
T: find a co-signer. A co-signer is a person who will
T: pay back your loan if you do not.
T: The loan papers you sign are formal contracts. You
T: are obligated to pay back an agreed upon amount by a
T: certain day. Borrowers are sometimes charged large
T: amounts of money as a penalty for making late payments.
T: If a borrower gets behind in payments, the loan agency
T: may repossess (take back) the merchandise for which
T: the loan was taken, assume ownership of property
T: listed as collateral, and/or sue for nonpayment. A
T: borrower's down payment will be lost and his/her credit
T: history will be badly damaged. If you ever find
T: yourself in a situation in which you can not meet
T: your credit obligations, contact those persons to whom
T: you owe money and attempt to work out a solution to
T: your problem with them. Often lenders will help
T: people who are trying to meet obligations.
Q: If you buy a car on credit which is listed at $1,000
Q: and pay the car dealer for the car in twelve equal
Q: installments of $100, how much interest will you
Q: be paying?

A: N

M: $200

Q: Can a lender charge you for making a late payment?

A: N

M: Yes

Q: Should monthly installment payments total 20 percent

Q: of your take-home pay?

A: N

M: No

T: If you decide to take out a loan from a bank, you will

T: talk to a loan officer. The loan officer will rate

T: the advisability of giving you a loan on a point system.

T: You will be asked to list present assets (total

T: property of a person) and liabilities (debts or pay-

T: ments that a person is obligated by law to pay) so that

T: the loan officer can figure your net worth (difference

T: between a person's assets and liabilities). Net worth,

T: job history, and credit history are probably the areas

T: which will receive the most points when the loan officer

T: is trying to decide whether or not to give you the loan.

T: Other considerations will be yearly take-home pay,

T: promise of collateral or a co-signer, number of

T: dependents, and total amount of monthly payments.

T: Usually a credit check is run, at a small charge to

T: the person applying for the loan, and an employer and
T: personal references are contacted and asked their
T: opinion about the borrower. If the loan is being
T: taken out to pay for a car or other merchandise, the
T: loan officer may ask to see the merchandise before
T: issuing the loan so that he/she can judge the item's
T: worth. Loans are seldom given for more than the value
T: of merchandise listed in bank reference books.
T: If the loan officer decides to give you the loan,
T: read the contract carefully before signing. Remember
T: that the Truth in Lending Act requires the lender to
T: tell the borrower the actual annual rate of interest.
T: Ask for this information. Find out when the payments
T: will be due and the amount of penalty charged for a
T: late payment. If your loan application is turned
T: down, ask the reason why. There may be something you
T: can do so that you will not be turned down the next time.

Loan Application

Q: Is job history important to a loan officer?

A: N

M: Yes

Q: What is net worth?

A: N

M: Difference between a person's assets and liabilities.

Q: If you are buying a car or merchandise, will the loan

Q: officer want to see what you are buying?

A: N

M: Yes

T: Filling out the loan application is a major job because

T: it requires a good deal of information about you.

T: Complete as much of the loan application as possible.

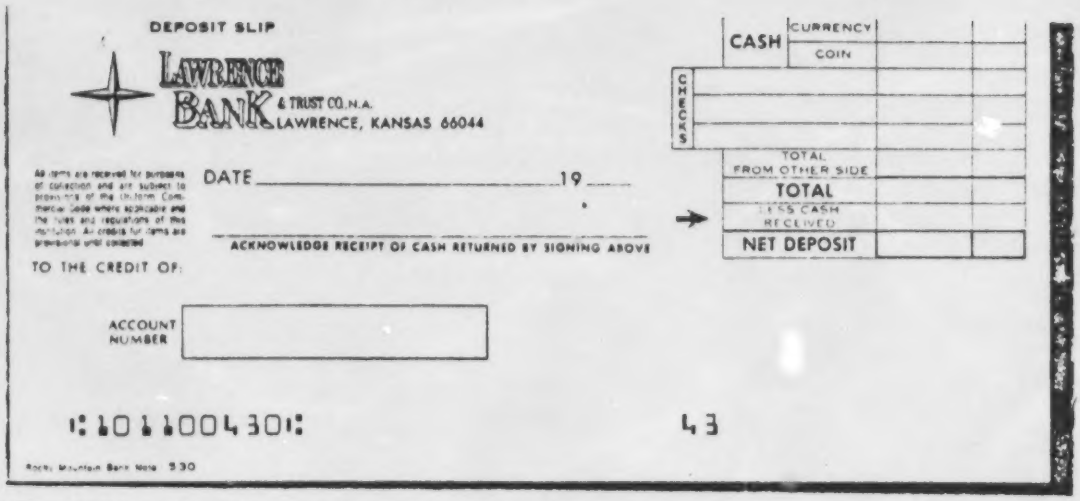
G: HLIN

G: HLIN B, C at D

G: VLIN E, F at G

E: End

Figure 1: Examples of Savings Deposit Slips



DEPOSIT SLIP

LAWRENCE BANK & TRUST CO. N.A.
LAWRENCE, KANSAS 66044

All items are received for purposes of collection and are subject to provisions of the Uniform Commercial Code where applicable and the rules and regulations of this institution. All checks for items are provisional until collected.

DATE _____ 19 ____

ACKNOWLEDGE RECEIPT OF CASH RETURNED BY SIGNING ABOVE

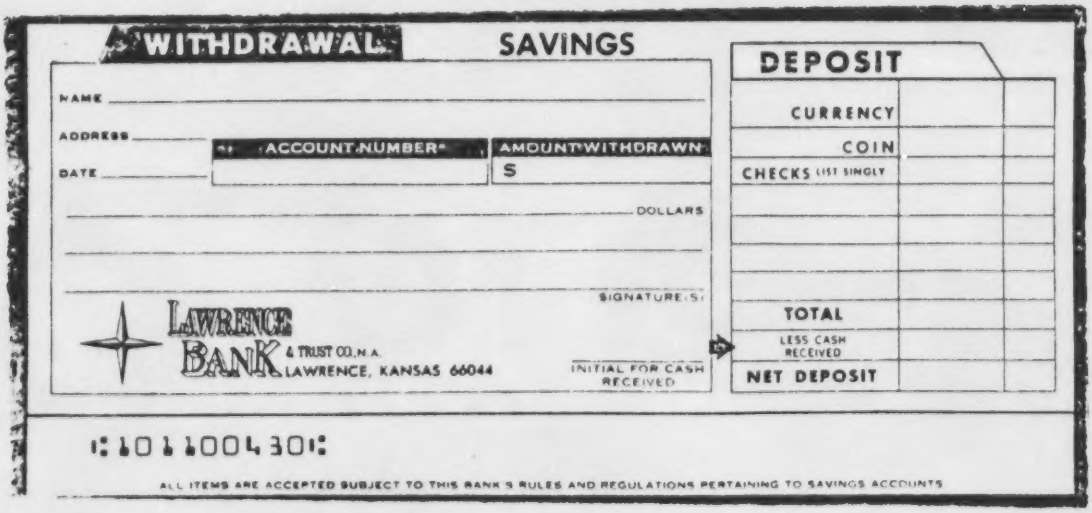
TO THE CREDIT OF:

ACCOUNT NUMBER

CASH	CURRENCY		
	COIN		
CHECKS			
TOTAL FROM OTHER SIDE			
TOTAL			
LESS CASH RECEIVED			
NET DEPOSIT			

⑆101100430⑆ 43

Rocky Mountain Bank Note 330



WITHDRAWAL SAVINGS

NAME _____

ADDRESS _____

DATE _____

ACCOUNT NUMBER	AMOUNT WITHDRAWN
	$

_____ DOLLARS

_____

_____ SIGNATURE(S)

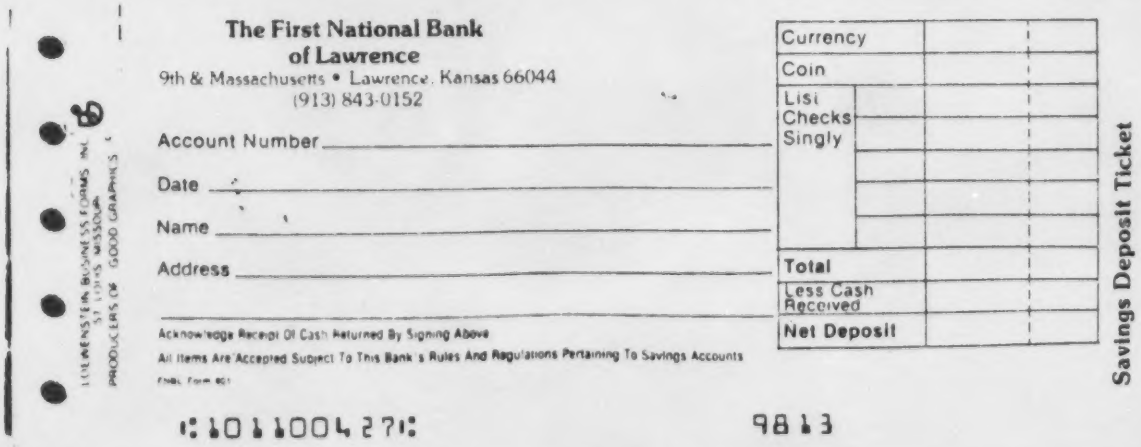
LAWRENCE BANK & TRUST CO. N.A.
LAWRENCE, KANSAS 66044

INITIAL FOR CASH RECEIVED

DEPOSIT		
CURRENCY		
COIN		
CHECKS (LIST SINGLY)		
TOTAL		
LESS CASH RECEIVED		
NET DEPOSIT		

⑆101100430⑆

ALL ITEMS ARE ACCEPTED SUBJECT TO THIS BANK'S RULES AND REGULATIONS PERTAINING TO SAVINGS ACCOUNTS



The First National Bank of Lawrence
9th & Massachusetts • Lawrence, Kansas 66044
(913) 843-0152

Account Number _____

Date _____

Name _____

Address _____

Acknowledge Receipt Of Cash Returned By Signing Above

All Items Are Accepted Subject To This Bank's Rules And Regulations Pertaining To Savings Accounts

Currency		
Coin		
List Checks Singly		
Total		
Less Cash Received		
Net Deposit		

Savings Deposit Ticket

LOWENSTEIN BUSINESS FORMS, INC. ST. LOUIS, MISSOURI PRODUCERS OF GOOD GRAPHICS

FNBL Form 601

⑆101100427⑆ 9813

Figure 2: Savings Deposit Passbook

DATE	WITHDRAWALS	DEPOSITS OR INTEREST	BALANCE	DATE	WITHDRAWALS	DEPOSITS OR INTEREST	BALANCE

PLEASE USE YOUR ACCOUNT NUMBER ON ALL DEPOSITS AND WITHDRAWALS

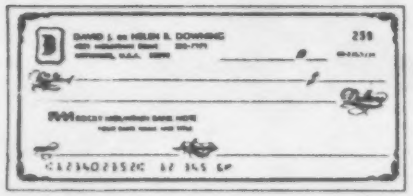
PLEASE USE YOUR ACCOUNT NUMBER ON ALL DEPOSITS AND WITHDRAWALS

Figure 3: Checkbook Ordering Brochure
(You have many choices for ordering checkbooks and checks)

(Also see other side)

Regency an outstanding new check design...

Form B (register style)
CopiCheck

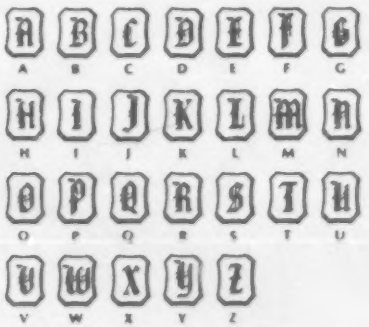


As old as yesterday... as new as tomorrow — this distinctive check design is for today.

A touch of elegance may be added with an Old World style initial, or choose from the classic Centurion or Aged Coin design cuts.

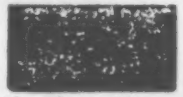
To order Regency Checks:
with initial — R-(indicate initial)
with Centurion — R-1
with Aged Coin — R-2
plain (without cut) — R-Plain

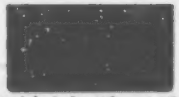
R-1 R-2



Covers

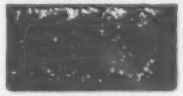
Traditional Covers

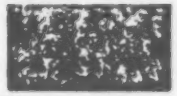

Sky Blue SB


Midnight Blue MB

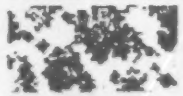
Sage Green SG

Tattersall TA


Executive Black EB

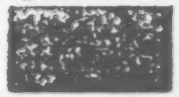

Tile Red TR

Textured Covers


Blue Inca BI

Highlander HL

Matador MT


Western WS

Petit Point PP

Navajo NA

Tiki TK

Azure AZ

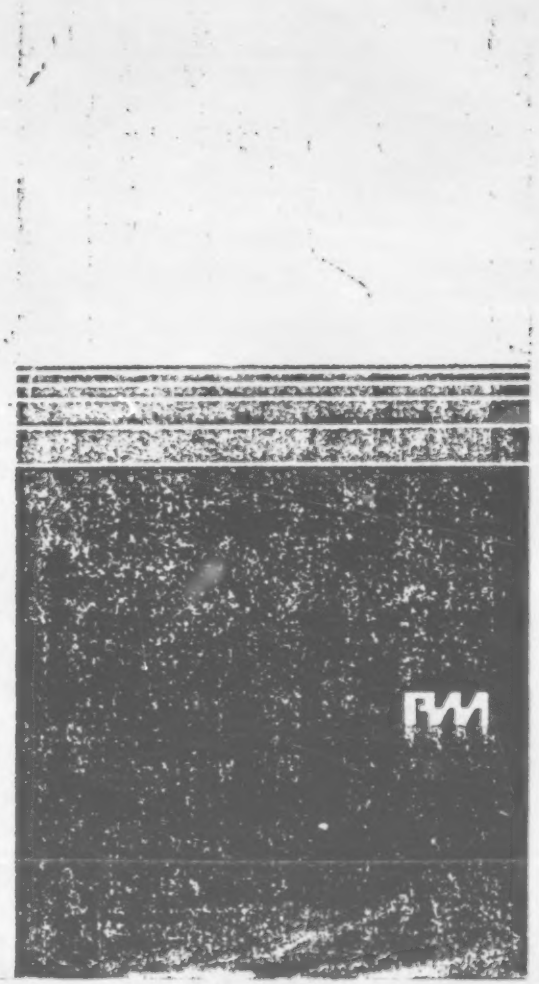
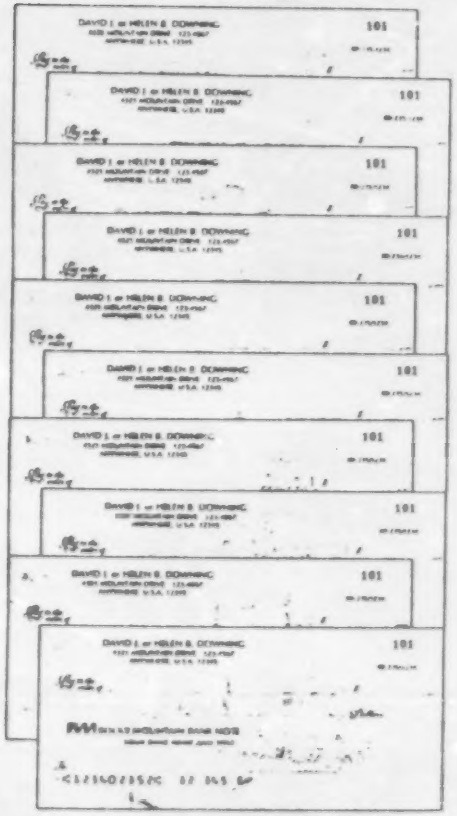


Figure 4

Legacy

Ten rotating illustrations
Available in:
Form B (register style)
Eight rotating illustrations
Available in:
Form DP (end stub) and /
Form NTS



Finesse

Four rotating designs

Form B (register style) only

Mountain Splendor

Four rotating scenes

Form B (register style) only

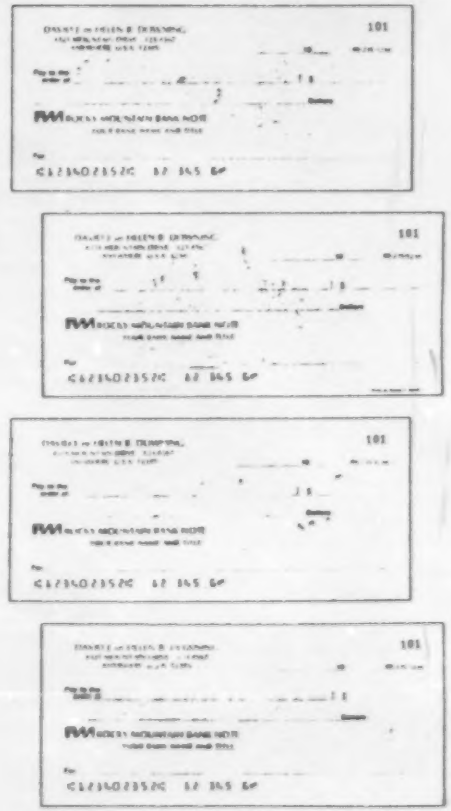
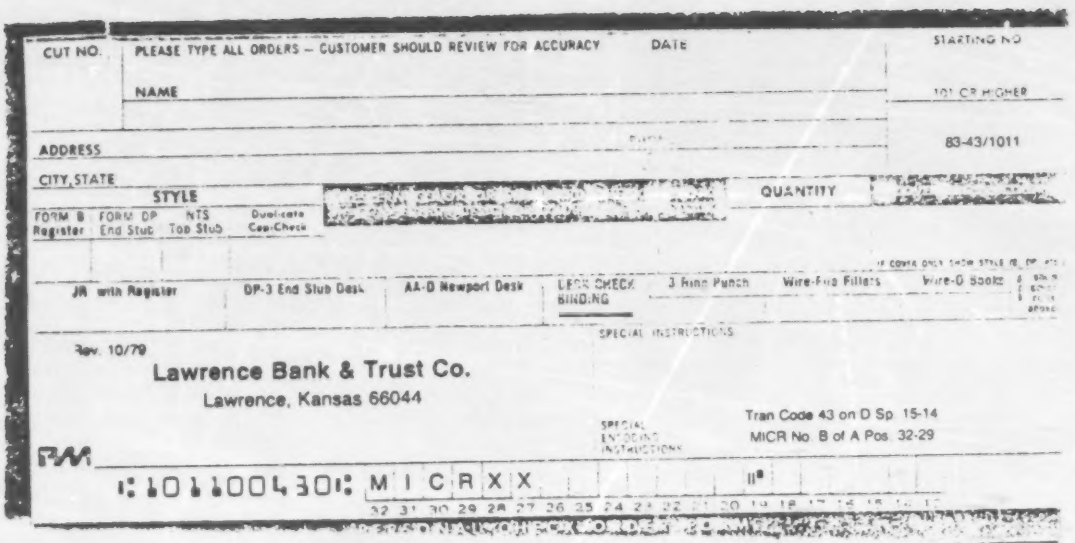


Figure 5: Examples of Ordering Forms for Checks



CUT NO. | PLEASE TYPE ALL ORDERS – CUSTOMER SHOULD REVIEW FOR ACCURACY | DATE | STARTING NO

NAME | 101 OR HIGHER

ADDRESS | 83-43/1011

CITY, STATE

STYLE | QUANTITY

FORM B Register | FORM DP End Stub | NTS Top Stub | Duplicate Copy Check

JR with Register | DP-3 End Stub Desk | AA-D Newport Desk | LASER CHECK BINDING | 3 Ring Punch | Wire-Five Fillers | Wire-O Books

SPECIAL INSTRUCTIONS

Rev. 10/79

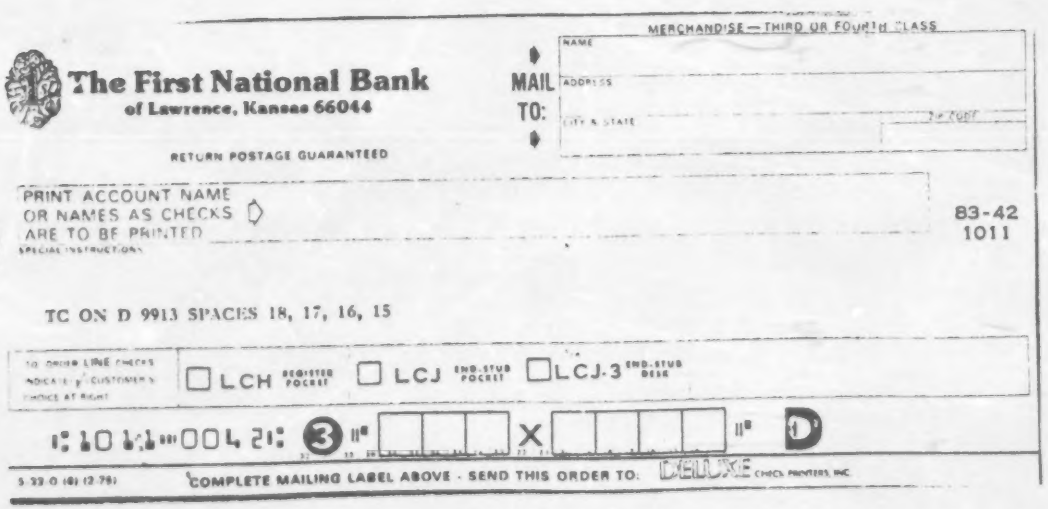
Lawrence Bank & Trust Co.
Lawrence, Kansas 66044

SPECIAL ENCODING INSTRUCTIONS

Tran Code 43 on D Sp. 15-14
MICR No. B of A Pos. 32-29

⑈10110043⑈ M I C R X X ⑈

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11



The First National Bank
of Lawrence, Kansas 66044

RETURN POSTAGE GUARANTEED

MERCHANDISE — THIRD OR FOURTH CLASS

MAIL TO:

NAME

ADDRESS

CITY & STATE

ZIP CODE

PRINT ACCOUNT NAME OR NAMES AS CHECKS ARE TO BE PRINTED

SPECIAL INSTRUCTIONS

83-42
1011

TC ON D 9913 SPACES 18, 17, 16, 15

TO ORDER LINE CHECKS INDICATE BY CUSTOMER'S CHOICE AT RIGHT

☐ LCH REGISTER POCKET ☐ LCJ END-STUB POCKET ☐ LCJ-3 END-STUB DESK

⑈10111004 21⑈ 3 ⑈ [ ][ ][ ][ ] X [ ][ ][ ][ ] ⑈ D

5-33-0 (8) (2-78) COMPLETE MAILING LABEL ABOVE - SEND THIS ORDER TO: DELUXE CHECK PRINTERS, INC.

Figure 6: Example of Written Check. What's Wrong?

JANICE KING
2401 W. 25TH ST., APT. 11-A5
LAWRENCE, KS 66044

No. 107

19 ____ 18-7084 / 3010

Pay to the order of Dillons $ 5.00

Five and no/100 DOLLARS

anchor savings
ASSOCIATION
Lawrence, Kansas 66044

Memo ____ JANE DOE

⑆301070849⑆ 51048005923⑈0 0107

Figure 7: Be sure to Void checks when you can't use them.

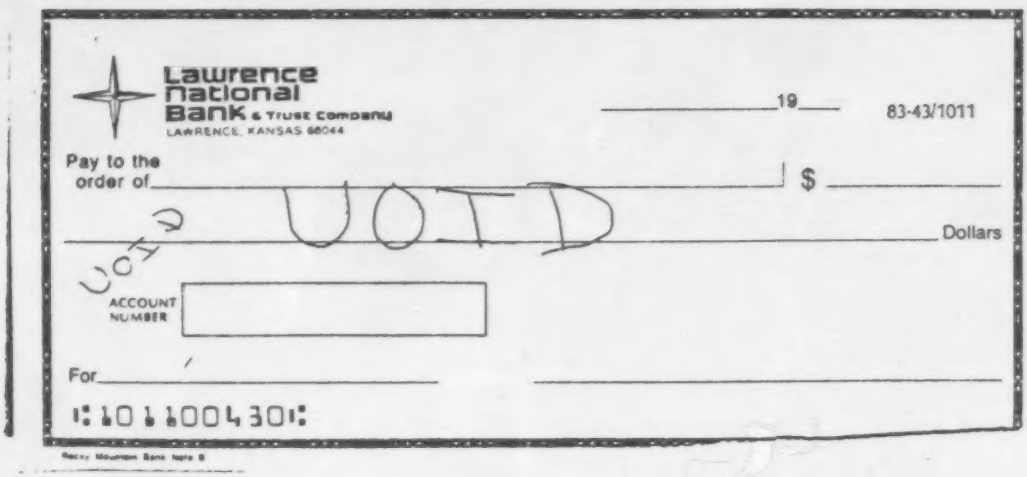


Figure 8

CREDIT APPLICATION (Closed end, unsecured/secured credit)

IMPORTANT: Read these Directions before completing this Application.

Check Appropriate Box

☐ If this is an application for an individual loan and you are relying on your own income or assets and not the income or assets of another person as the basis for repayment of the credit requested, complete only Sections A and D, and sign this application. If the requested loan is to be secured, also complete Sections C and E.

☐ If this is an application for a joint loan involving you and another person, complete all Sections except E, and both parties should sign this application. If the requested loan is to be secured, then complete Section E.

☐ If this is an application for an individual loan, but you are relying on income from alimony, child support, or separate maintenance or on the income or assets of another person as the basis for repayment of the credit requested, complete all Sections except E, to the extent possible, and sign this application. If the requested loan is to be secured, then complete Section E.

Amount Requested	Payment Date Desired	Proceeds of Loan To be Used For

SECTION A – INFORMATION REGARDING APPLICANT

(Title is Optional)

MS. ☐ MISS ☐ MR. ☐ MRS. ☐ OTHER _____

Full Name (Last, First, Middle): _____ Age: _____

Present Street Address: _____ Time at present Address: _____

City: _____ State: _____ Zip: _____ Telephone: _____

Social Security No.: _____ Driver's License No.: _____

Former Street Address: _____ Time there: _____

City: _____ State: _____ Zip: _____

Present Employer: _____ How long? _____ Telephone: _____

Position or title: _____ Name of supervisor: _____

Employer's Address: _____

Previous Employer: _____ How long? _____

Previous Employer's Address: _____

Present salary or commission: $ _____ per _____ No. Dependents _____ Ages: _____

Income from alimony, child support, or separate maintenance payments need not be revealed if you do not choose to have it considered as a basis for repaying this obligation. Other income: $ _____ per _____ Source of other income _____

Alimony, child support, separate maintenance received under: court order ☐ written agreement ☐ verbal understanding ☐

_____

Checking Account No.: _____ Institution and Branch: _____

Savings Account No.: _____ Institution and Branch: _____

Name of nearest relative not living with you: _____ Telephone: _____

Relationship _____ Address _____

SECTION B – INFORMATION REGARDING JOINT APPLICANT OR OTHER PARTY (Use separate sheets if necessary.)

(Title is Optional)

MS. ☐ MISS ☐ MR. ☐ MRS. ☐ OTHER _____

Full Name (Last, First, Middle): _____ Age: _____

Relationship to Applicant (if any): _____

Present Street Address: _____ Time at present Address: _____

City: _____ State: _____ Zip: _____ Telephone: _____

Social Security No. _____ Driver's License No.: _____

Present Employer: _____ How long? _____ Telephone: _____

Position or title: _____ Name of supervisor: _____

Employer's Address: _____

Previous Employer: _____ How long? _____

Previous Employer's Address: _____

Present salary or commission: $ _____ per _____ No. Dependents _____ Ages: _____

Income from alimony, child support, or separate maintenance payments need not be revealed if you do not choose to have it considered as a basis for repaying this obligation. Other income: $ _____ per _____ Source of other income _____

_____

Alimony, child support, separate maintenance received under: court order ☐ written agreement ☐ verbal understanding ☐

Have you ever borrowed from this institution? _____ When? _____ Branch: _____

Checking Account No. _____ Institution and Branch: _____

Savings Account No. _____ Institution and Branch: _____

Name of relative not living with Joint Applicant or Other Party _____ Telephone: _____

Relationship to Joint Applicant or Other Party _____ Address _____

SECTION C – APPLICANT'S MARITAL STATUS

(Do not complete if this is an application for an unsecured loan.)

☐ Married ☐ Separated ☐ Unmarried (inc. single, divorced, and widowed)

USLIFE/SAVS FORM 642 REV. MAR. 23, 1977

SECTION D – ASSET AND DEBT INFORMATION (If Section B has been completed, this Section should be completed giving information about both the Applicant and Joint Applicant or Other Person. Please mark Applicant-related information with an "A." If Section B was not completed only give information about the Applicant in this Section.)

ASSETS OWNED (Use separate form if necessary.)

Description of Assets	Value	Encumbered?	Name(s) of Owner(s) of Record
Cash	$		
Automobiles (Make, Model, Year)			
Cash value of Life Insurance (Issuer, Face Value)			
Real Estate (Location, Date Acquired)			
Marketable Securities (Issuer, Type, Shares)			
Other (List)			
Total Assets	$		

OUTSTANDING DEBTS (Include charge accounts, installment contracts, credit cards, rent, mortgages, etc. Include at least 3 credit references. Use separate sheet if necessary.)

Name of Creditor	Type of Debt or Acct. No.	Name in Which Acct. Carried	Original Debt	Present Balance	Monthly Payments	Amount Past Due
1. (Landlord or Mortgage Holder)	☐ Rent Payment ☐ Mortgage		$	$	$	$
2.						
3.						
Total Debts			$	$	$	$

Are you a co maker, endorser, or guarantor on any loan or contract? YES ☐ NO ☐ IF "YES" FOR WHOM? _____ TO WHOM? _____

Are there any unsatisfied judgments against you? YES ☐ NO ☐ AMOUNT $_____ IF "YES" TO WHOM OWED? _____

Have you ever bankrupt (omit if more than 14 years ago) YES ☐ NO ☐ IF "YES" WHERE? _____ YEAR _____

Other obligations – (e.g., Liability to pay alimony, child support, separate maintenance. Use separate sheet if necessary.)

SECTION E – SECURED CREDIT Briefly describe the property to be given as security:

And list names and addresses of all co owners of the property:

NAME ADDRESS

If the security is to be real estate, give the full name of your spouse (if any) _____

I/We authorize the Lending Institution to make whatever credit inquiries that it deems necessary in connection with this credit application or in the course of review or collection of any credit extended in reliance on this application. I/We authorize and instruct any person or consumer reporting agency to compile and furnish to the Lending Institution any information that it may have or obtain in response to such credit inquiries and agree that such information, along with this application, shall remain the Lending Institution's property whether or not credit is extended.

All information set forth in this application is declared to be a true representation of the facts, made for the purpose of obtaining the credit requested, and any willful misrepresentation on this application could result in criminal action.

Applicant's Signature Date Joint Applicant's Signature Date

Presentation Disk

Return

Exercise - Type in the following.

Job Opportunities

T: The chances of your getting a job when you leave school
T: are affected by three things: 1) the number of jobs
T: available, 2) the number of people trying to get them,
T: and 3) how well your qualifications meet the require-
T: ments. You need to prepare yourself for a future job
T: by anticipating job prospects and preparing yourself
T: for the job which is most needed in the world of work.
T: The first thing for you to do is to review up-to-date
T: information about job prospects. The Job Service
T: Center provides a job information service which will
T: help you. The counselor will provide you with infor-
T: mation about occupational trends in the state and
T: county in which you live or want to live. If you
T: would visit the Job Service Center right now, the
T: counselor would tell you that the services industry
T: and the manufacturing industry need the most jobs.
T: This is true until 1985. The services industry includes
T: such jobs as law enforcement workers, teachers, social

T: workers. postal workers, cooks, fire fighters, health
T: inspectors, etc. Manufacturing has jobs for tool and
T: dye makers, assemblers, welders, and machinists. The
T: industry which will need the least number of workers
T: in Kansas is mining. So if you are interested in jobs
T: related to mining, you need to have outstanding skills
T: for mining jobs or move to a state which offers more
T: jobs. Now let's review what you have learned about
T: jobs and job opportunities.
Q: What are the three things that affect your job?
A: N
M: The number of jobs available.
M: The number of people trying to get the job.
M: How well your qualifications fit the job.
Q: What industries offer the most jobs?
A: N
M: Services industry.
M: Manufacturing industry.
Q: What industry offers the least number of jobs?
A: N
M: Mining.
T: If the services industry or the manufacturing industry
T: does not interest you, there are occupations which
T: also offer job opportunities. The clerical occupation

T: needs about 16 percent of the people working and the
T: professional and technical occupation takes 14 percent
T: of the employment force. Included in the clerical
T: occupation are jobs for secretaries, typists, book-
T: keepers, cashiers, data processors, telephone operators,
T: sales people, and delivery persons. The professional
T: and technical occupation is made up of engineers,
T: nurses, college professors, and accountants. The
T: professional and technical profession requires you to
T: attend school for a lengthy period of time, whereas
T: training for clerical occupations takes less time and
T: allows you to enter the job market earlier in life.
T: Now for a quick review of job opportunities.
Q: What occupations offer the most job opportunities?
A: N
M: Clerical
M: Professional and technical
T: If a job in one of these occupations interests you,
T: the next thing for you to do is collect information
T: about the job requirements and the salary. Start with
T: your public library, high school or college library,
T: or the counseling office to look up the job that
T: interests you in the Occupational Outlook Handbook
T: and a Bureau of Labor Statistics publication Area Wage

T: Surveys, which includes data on average earnings and
T: benefits in different occupations and industries by
T: region. Another publication which will help you is
T: Employment and Earnings. This publication comes out
T: monthly and has information about employment develop-
T: ments including earnings by industry for the nation.
T: Another source of information is the counselor in
T: your Job Service Center. This person can give you
T: information on average earnings for the jobs in your
T: area. If you request it, the counselor can test
T: you to determine if you have the personality and
T: aptitude for the job you are interested in. The
T: counselor can help you match your skills with the job
T: qualifications. Remember you have to ask for this
T: service, but it is available to you.
Q: Where are places you can get information about an
Q: occupation that interests you?
A: N
M: Occupational Outlook Handbook
M: Area Wage Surveys
M: Employment and Earnings
T: Now that you are familiar with ways to find out about
T: job opportunities, let's discuss how you would find
T: information about actual job openings. The Job

T: Service Center has already been mentioned as a great
T: source of help. The newspaper Help Wanted ads is
T: another source. Sometimes the Help Wanted ads are
T: difficult to understand because the descriptions are
T: so brief. To understand ads, call the newspaper's
T: classified ad department for help. The newspaper's
T: telephone number is usually given on the first page
T: of the classified ads section. Not all jobs are
T: advertised. You can check with (1) private employ-
T: ment agencies, (2) people who currently hold jobs
T: similar to what you want, and (3) personnel offices
T: of business which have jobs like those you are inter-
T: ested in. Personally visit these places and tell them
T: about the job you would like to have. You should
T: remember that if you ask a private employment agency
T: to help you, there are fees that you or your future
T: employer will have to pay the agency for getting you
T: and the job together. Be sure to inquire about fees
T: before you fill out and sign the application forms.
T: Once you have a list of all the job openings, your
T: next move is to apply and convince the employers you
T: are the best person for the job.
Q: Name three ways you would find out about the actual
Q: job openings?

A: N

M: Job Service Center

M: Help Wanted Ads

M: Private Employment Agencies

M: People who hold jobs similar to the one you are

M: interested in.

M: Personnel offices of businesses which have jobs like

M: the one you are interested in.

L: 5

TY: Great! You know the ways to find out about actual

TY: job openings.

JY: E

L: 4

TY: Good. You named four of the five ways.

JY: E

L: 3

TY: OK. You named three correctly.

T: There are very few occupational areas in which the

T: supply of jobs exceeds the number of persons qualified

T: to fill them. Generally, there are several equally

T: qualified individuals applying for the same job. In

T: such cases, the type of impression that each applicant

T: makes on the interviewer will be the deciding factor

T: as to who will get the job.

T: The employer's first impression of you will come from
T: the application form and/or resume. These items
T: whether neat and accurate or disorderely and incomplete
T: will be the first samples of your work that the
T: employer will see.
T: Jason Miller, a nineteen year old high school graduate
T: who majored in business, needs to answer the following
T: questions on an application form for the State. From
T: the possible answers to each questions, select the
T: ones that you think would give the employer the best
T: impression of Jason.
Q: Position(s) applied for _____
Q: (a) anything available job (b) typist (c) clerk typist
Q: or related position
A: N
M: Clerk typist or related position
TY: (c) is the best answer. Jason should have a clear idea
TY: about the type of work that he wants to do without
TY: limiting himself to only one job. If he were to answer
TY: typist, he might not be considered for a job as a
TY: secretary, clerk, etc.
Q: General Physical Condition? _____.
Q: (a) excellent (b) good (c) fair
A: N

M: (b) good

TY: The best answer is excellent. The other two answers
TY: may give the employer the impression that Jason's
TY: health is not the best. If Jason does have health
TY: problems, he should explain why the problems will not
TY: affect his ability to attend work or to do the tasks
TY: required on the job.

Q: Salary Required_____.

Q: (a) minimum wage (b) prevailing wage for position.

A: N

M: (c) $250 a week.

TY: Prevailing wage for position is usually the best answer.
TY: A specific amount should not be mentioned unless the
TY: applicant is aware of what the job pays.

Q: Reason for leaving previous job? _____.

Q: (a) couldn't get along with the boss, (b) hours
Q: conflicted with school, (c) wanted to go skiing with
Q: friends for two weeks.

A: N

M: (b)

TY: Hours conflicted with school is the most reasonable
TY: answer. Jason should not make negative remarks about
TY: his former boss; and quitting to go skiing makes Jason
TY: sound immature and unreliable.

Q: Date available for work _____.

Q: (a) immediately (b) as soon as I get my car fixed

Q: (c) two weeks

A: N

M: (a) or (c)

TY: Both "immediately" and "two weeks" are correct depending

TY: on Jason's circumstances. If he is unemployed immedi-

TY: ately is most appropriate. If he is working, he should

TY: give his present employer two weeks notice. Answer

TY: as soon as I get my car fixed makes Jason seem un-

TY: reliable. The employer may think that Jason will use

TY: the car or a similar excuse whenever he feels like

TY: missing work.

Q: Special skills and qualifications?_____.

Q: (a) leave it blank (b) Seem to get along well with

Q: others. Was elected president of the business club.

Q: (c) Have had little opportunity to acquire special

Q: skills so far. Will work hard to learn on the job.

A: N

M: (b)

TY: The best answer is "seems to get along well with others."

TY: Everyone has some special skills or talents, whether

TY: or not he/she has worked previously. School activities

TY: extra-curricular activities, and classes should be

TY: considered when trying to decide where your special
TY: skills lie. When filling out applications, do not
TY: leave questions unanswered. If the question does not
TY: apply to you, write "not applicable."
T: A satisfactory application can get you a job interview.
T: An interview is a face-to-face meeting with the
T: employer. Interviews give you a chance to sell your-
T: self as the best person for the job. There are a few
T: simple rules to remember about job interviews.
T: During an interview _____
T: 1. Make positive comments about what you think you
T: can contribute if you are hired.
T: 2. Do not lie about a handicap, but explain why the
T: handicap will not keep you from performing the
T: job satisfactorily.
T: 3. Do not make negative comments about a former
T: employer.
T: 4. Try to relax, smile, and converse easily but
T: politely with the interviewer; however, let the
T: interviewer direct the conversation.
T: 5. Be on time for the interview.
T: 6. Do not bring friends or family to the interview.
T: 7. Come to the interview prepared. Know a little
T: about the company, the job opening, and the skills

T: that you have to offer the company. If possible,
T: know the interviewer's name and title.
T: 8. Wear clothing which fits the job. For example if
T: the job will require a suit and tie, wear a suit
T: and tie to the interview. More casual clothing
T: would be appropriate if applying for a job as
T: a machinist.
T: 9. Have a realistic answer in mind for questions
T: regarding salary requirements. A good answer may
T: be prevailing wage for the _____
T: Read the following interviews, keeping in mind the
T: nine points discussed. Think of at least two things
T: in each interview that would create a bad impression
T: of the applicant and probably keep him/her from getting
T: the job. Keep a piece of paper and pencil handy to
T: answer questions about the interview.
G: GRF
G: HLIN B, C at D
G: VLIN E, F at G

Situation 1

MR. CARLSON: Hello, I"m Mr. Carlson, the plant foreman. (Extending his hand).

PETE: (Nervously shaking Mr. Carlson's hand) I'm Pete Jamison.

MR. CARLSON: Please have a seat and let me tell you about

the position we have open. The person we hire will have to do a little bit of everything. He or she will be a roamer, doing the job of any other employee from this area who is ill or on vacation. Learning so many jobs will be difficult at first, but it will benefit the person in the long run because it will make him/her aware of the total plant operation. It is important for the person who gets the position to be able to weld, measure accurately, lift up to 50 pounds, stand for long periods of time, and work quickly. Knowing this much about the job, tell me why you think you should get it.

PETE: I took welding at the vo-tech and I like to do that. My instructor thought that my work was pretty good. I don't know about lifting and stuff. My back really hasn't been very strong since I hurt it in football. Don't you have just a welding job?

MR. CARLSON: No, this is the only position we have open at this time. We do occasionally have openings for welders, but we usually fill the openings with employees who are already working for the company. You might apply for a position as an office boy if lifting is a real problem for you. Then you would be in good shape to apply for an opening as a welder when one come up.

PETE: Well, thanks anyway, but I think I'll keep looking

for a straight welding job. I don't really think I would like office work.

MR. CARLSON: It's been nice talking to you, Pete. Good luck with finding your first job. (Stands and extends his hand).

G: Text

Q: Name two things Pete did wrong during the interview.

M: 1. When Mr. Carlson wished Pete good luck, he was
M: probably thinking that Pete was really going to
M: need it. Pete did not seem to want to take any
M: additional steps toward reaching his job goal.
M: Although Pete had taken vocational training, he
M: had no job experience. He should have at least
M: considered the alternatives for gaining job
M: experience that Mr. Carlson was offering. Instead,
M: Pete ruled out any chances of getting a job in
M: this plant and will be in trouble if no other
M: job comes up.
M: 2. Handicaps should be played down. For example,
M: Pete could have said that it was necessary,
M: because of a back injury, for him to avoid lifting
M: more than twenty-five pounds alone; but that he
M: could perform all other aspects of the job without
M: problem. He might also stress his assets, such

M: as exceptional accuracy and/or speed.

M: 3. Pete does not seem too certain about what he

M: likes. He can hardly convince an employer that

M: he will be a great asset to the company when he

M: is so unclear about personal strengths and weak-

M: nesses. (I don't really think I would like

M: office work).

M: 4. Pete did not research the job requirement before

M: applying for it or he would have known about the

M: lifting.

G: GRF

G: HLIN B, C at D

G: VLIN E, F at G

Situation 2

MARY: (Walking in quickly and putting out her hand) Hi. I'm Mary Carpenter and I'm here about the receptionist job.

MRS. KANE: (Taking Mary's hand) Hello I'm Mrs. Kane. Please have a seat.

MARY: (Slumping down in a chair and chewing gum noisely) Thanks.

MRS. KANE: (Shuffling through papers on her desk) I see by your application that you worked as a typist for Boston Printing Company for three months. Could you tell me about what you did in that job.

MARY: Did Mr. Boston contact you about me? He didn't like me very much for some reason so he's liable to say about anything.

MRS. KANE: I haven't talked to Mr. Boston yet. Do you feel that he would not recommend you for the job?

MARY: Like I said, we didn't get along very well. That's why I left the job (lighting a cigarette).

MRS. KANE: What were your job duties?

MARY: I was hired to type and use copying machines, but Mr. Boston had me do all sorts of boring things like make coffee or run errands. He was too lazy to even pour his own coffee.

MRS. KANE: The receptionist we hire will also have to run errands and make coffee. I'm afraid you would not be happy here either.

MARY: I wouldn't mind doing those things for you. I really like this office and would like to work here.

MRS. KANE: Well, I have your application. I'll decide who gets the job within the week.

MARY: Can I call you in a few days?

MRS. KANE: If you wish, but I will call all applicants as soon as I make a decision. Thank you for coming in.

MARY: Good-bye.

G: Text

Q: Name two things Mary did wrong during the interview.

M: 1. Although Mary was asked to talk about her job
M: experience, she never did. She did not make one
M: positive comment about job skills, job experience,
M: or contributions which she could make to the
M: company if she were hired.
M: 2. Mary spent most of the interview complaining
M: about a former boss. Mrs. Kane has little reason
M: to believe that Mary will not complain about her
M: new supervisor and company if she is hired.
M: 3. During an interview the applicant should try to
M: relax; however, Mary was too relaxed. She
M: infringed upon Mrs. Kane's rights by smoking.
M: Slumping and chewing gum loudly created the
M: impression that Mary really didn't care very much
M: about this job. A receptionist is often the first
M: company employee that the public meets. Would you
M: want Mary to greet your company's customers?

G: GRF

G: HLIN B, C at D

G: VLIN E, F at G

Situation 3

MR. BRYANT: Hello. I am Jeff Bryant, owner of this restaurant (extends hand and smiles).

TOM: Hi. I'm Tom Henderson and I'm here to interview for the job as short order cook (takes Mr. Bryant's hand and shakes it firmly).

MR. BRYANT: Please sit down, Tom. Tell me, how did you find out about the job?

TOM: A friend of mine, Howard Wells, works for you. He told me about the job.

MR. BRYANT: Howard is a good employee. Have you known each other long?

TOM: We went to school together.

MR. BRYANT: Have you worked as a short order cook before?

TOM: Yes, I've cooked at Sunnyview camp for the last two summers. I also took every class on cooking that they offered at the high school.

MR. BRYANT: You like to cook, then?

TOM: Oh, yes. It's a lot of fun.

MR. BRYANT: You are eighteen, Tom. Do you have any plans to get further training or education?

TOM: No. I think school is a waste of time. I quit after I had completed my final cooking course.

MR. BRYANT: You quit school before receiving a diploma?

TOM: Yes, sir. I wasn't passing many courses anyway.

MR. BRYANT: Why was that?

TOM: I seldom attended the ones that didn't interest me. Who

needs math and English anyway?

MR. BRYANT: A short order cook for one. He or she will have to inventory, measure ingredients, plan menus, and so on.

TOM: I never thought of that.

MR. BRYANT: Have you thought about what salary you would have to make before you would take the job?

TOM: No. I'm sure that whatever you want to pay me will be okay.

MR. BRYANT: Is there anything you want to know about the job?

TOM: Are work schedules pretty flexible? I'd hate to work all weekend.

MR. BRYANT: Weekends are the busiest time for a restaurant. We do try to let each cook have off either Friday or Saturday night every other weekend. You would also be off Tuesday and one other week day every week.

TOM: I guess that would be all right. You mentioned inventory and menu planning. Would I have to do a lot of that?

MR. BRYANT: Yes. This is a small restaurant so we all have to pitch in on all the tasks; menu planning, taking inventory, clean-up ...

TOM: Clean-up?

MR. BRYANT: Does that bother you?

TOM: I just figured you'd have someone hired to do that.

MR. BRYANT: No. Everyone cleans up his or her own area. Is there anything which hasn't come up which you feel you should tell me about your skills or qualifications?

TOM: I guess we've mentioned about everything.

MR. BRYANT: Then I have other applicants to interview. I will let you know my decision about the job by next Friday (stands to shake hand).

G: Text

Q: Name two things that Tom did wrong during the interview.

M: 1. Tom should have asked Howard more about the job.
M: He didn't seem to know anything that would be
M: required of him.

M: 2. Tom's comment about salary was not well thought
M: out. What Mr. Bryant decides to pay him might
M: not be fine with Tom.

M: 3. Tom concentrated more about what he was not crazy
M: about doing for the company than about the con-
M: tributions he could make if he were hired. In
M: other words, he did not do a satisfactory job of
M: selling himself. When Mr. Bryant asked him about
M: skills and qualifications, Tom should have been
M: prepared to tell Mr. Bryant a number of things
M: about himself which would be of benefit in the job
M: of short order cook.

T: Remember, your chances of getting a job increase when
T: you become adept at completing application forms and
T: taking interviews. Practice these skills often. It
T: is a good idea to develop a job information sheet,
T: composed of the information usually asked on application
T: forms, such as references, education, work experience
T: and special skills. Information on the sheet must be
T: accurate and correctly spelled. The information sheet
T: can then be used each time you need to fill out an
T: application.
T: If you do not get a job you interview for, do not get
T: discouraged. Keep a file of places you have gone for
T: interviews, questions you were asked, what you did
T: during the interview that you were pleased with, and
T: what you think you need to practice. You might ask the
T: person who interviewed you why you were not selected
T: for the job. Often the weaknesses the interviewer
T: perceived during an interview can be minimized through
T: developing positive answers to difficult questions.
T: For example to the question "Why were you fired from
T: your last job?" you might answer "I was fired for being
T: late too often, but I have since purchased a newer car
T: and made arrangements to ride to work with a friend if
T: I have car trouble. Because my car was the reason I

T: was late to the last job, tardiness will not be a
T: problem if I get this job." Take responsibility for
T: previous actions and make positive statements about
T: what you have done to improve the situation. Do
T: not lie. The interviewer can easily check your story
T: with people who know you.
T: Select the best answers in the following example and
T: mark them on a piece of paper.
G: GRF
G: HLIN B, C at D
G: VLIN E, F at G

Situation 4

MISS THOMPSON: Hello. I am Miss Thompson, the personnel officer at Williamson Beef Packing.

DAVID: Hi. I'm David Stans.

MISS THOMPSON: Won't you sit down, David? (looks at application and other papers in file) David, it says here that you are nineteen and that you went to Mountain View High School. Did you graduate from high school?

DAVID: (Answer 1) No. I didn't like school. The teachers were always picking on me. (Answer 2) No. I had some problems in high school and didn't finish however I'm taking night courses and will take the GED test next month.

MISS THOMPSON: You haven't been in high school for more

than a year and yet you haven't listed any job experience. What have you been doing since you left high school?

DAVID: (Answer 1) At first I tried working, but I had some personal problems that kept me from being very successful on a job. After about three months, I began going to youth counseling sessions at the Williamson Youth Foundation. Now I am a volunteer there and feel good about myself and what I'm doing. (Answer 2) Hanging around mostly. I've been trying to get myself together.

MISS THOMPSON: You have marked the question "Have you ever been arrested or convicted of a crime?" "Yes". Could you tell me about this?

DAVID: (Answer 1) The police busted a party I was at and there was some pot and some pills there. I wasn't even high, but they took me in anyway. Cops always hassle me. (Answer 2) I used to run around with a group of kids who used drugs. I was arrested at a party I went to with these kids because there were drugs at the party. Being arrested once was enough for me. I have since made different friends. I don't use drugs and neither do my new friends.

M: The answers are: 2, 1, and 2.

E: End

PAB/2

Very Simple

Interview Information

	Type name
	Press "Return"
p. 36 Creating a new exercise p. 37 & 38	Type 7 "Create a Presentation Disk/Test Run
	Type 1 Create a Presentation Disk
	(Read p. 39)
p. 39	Press Return and Label Disk
	Remove Presentation Disk
p. 40	Put your Mark Pilot Authoring Disk
	Press Return

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p. 41	Type: 2
	Press: Return
	Type: Inter
p. 42	Press: Return
	Insert Presentation Disk
	Press: Return
p. 43	

Exercise - Type in the following (Part of a lesson on how to get a job)

T: The job interview is the time when
T: you convince the employer you are
T: the person for the job. You can
T: get the job by giving the employer
T: reasons why you would be good for
T: the company. There are several things
T: you can do to prepare for the interview.
T: 1. Review your work history
T: 2. Learn about the job
T: 3. Learn about the company
T: 4. Get a good night's sleep
T: 5. Have a clean appearance
T: 6. Go alone to the interview.
T: Now, let's discuss each of the six
T: things you can do to prepare for the
T: interview.
Q: What is the first thing you can do to
Q: prepare for the interview?
A: N

Make into a sub-routine

M: Review you work history
M: Learn about the job
M: Learn about the company
M: Get a good night's sleep
M: Go alone to the interview
T: The correct answer is review your
T: work history! You know more about

T: your background and work history than
T: anyone else. This is something you can
T: talk about in the interview. You
T: should not have to scratch your head
T: or look at the ceiling before answering
T: questions about when you worked and
T: what you did on your jobs.
Q: What is the second thing you can do
Q: to prepare for the interview?
A: N

Make into a sub-routine

M: Learn about the job
M: Learn about the company
M: Get a good night's sleep
M: Have a clean appearance
M: Go alone to the interview
T: The correct answer is learn about
T: the job. Make sure you can correctly
T: talk about the duties, tools, and
T: equipment used on the job. Don't
T: try to bluff your way through the
T: interview. If you don't know some-
T: thing, say so.
Q: What is the third thing you can do
Q: to prepare for the interview?

Sub-routine

M: Learn about the company
M: Get a good night's sleep
M: Have a clean appearance

M: Go alone to the interview
T: Do not have beer or liquor or drugs
T: on your breath.
Q: What is another thing you can do
Q: to prepare for the interview?
M: Have a clean appearance
M: Go alone to the interview
T: The correct answer is have a clean
T: appearance. Dress is very important.
T: The employer is forming an impression
T: about you from your experience, your
T: manners, your attitudes, and from
T: your personal appearance. Give
T: your personal appearance careful
T: attention. Be clean with polished
T: shoes, clean fingernails, clean
T: clothes, and combed hair. This is
T: a business interview and being well
T: groomed should indicate that you
T: regard it as such. Besides, being
T: well-groomed and properly dressed will
T: boost confidence in yourself.
Q: What is the final thing you can do
Q: to prepare for the interview?
M: Go alone to the interview
T: The correct answer is go alone to the
T: interview. You are the one that is

T: applying for the job. Do not take
T: friends, relatives, or small children.
T: Now let's try it again.
Q: What are the six things to do in
Q: preparation for the interview?
A: N
M: Review your work history.
M: Learn about the job.
M: Learn about the company.
M: Get a good night's sleep.
M: Have a clean appearance.
M: Go alone to the interview.
L: 6
TY: Great! You know the things to do
TY: in preparation of your job interview.
Oi: Q2
L: 5
TY: Good. You named five correctly.
TY: Q2
L: 4
TY: OK You named four correctly.
TY: Q2
L: 3
TY: Sorry you named three try again.
TY: Q1
T: In a job interview the employer will
T: ask you a lot of questions. There

T: are many things that you can and
T: cannot be asked. You should be
T: familiar with the following questions
T: which can be asked in an interview:
T: Describe your past work experiences.
T: How did you like the work on your
T: previous job? In what accomplish-
T: ments on your last job did you take
T: the most pride? Why did you leave
T: your last job? What foreign language
T: can you read, write, or speak
T: fluently? Are there any reasons why
T: you would not be able to perform
T: the duties of the job?
T: How long do you think you'd like to
T: stay on your next job?
T: Why are you interested in working?
T: Are you able to travel?
Q: Now, name at least seven questions
Q: which you can be asked in a job
Q: interview.
A: N
M: Describe your past work experiences.
M: How did you like the work on your
M: previous job?
M: In what accomplishments on your last
M: job did you take tne most pride?

M: Why did you leave your last job?

M: What foreign language can you read,
M: write, or speak fluently?

M: Are there any reasons why you would
M: not be able to perform the duties
M: of the job?

M: How long do you think you'd like
M: to stay on your next job?

M: Why are you interested in working?

M: Are you able to travel?

L: 7

TY: Great! You know the questions which
TY: can be asked in the interview.

J: Q3

L: 6

TY: Good. You named six correctly.

JY: Q3

L: 5

TY: OK You named five correctly.

JY: Q3

L: 4

TY: Sorry, you named only four. Try again.

JY: Q2

T: There are many questions that should
T: not be asked in an interview. Such
T: questions violate your privacy, and
T: no employer should ask you the
T: following:

T: What is your date of birth?

T: Where were you born?

T: Are you a citizen of the U.S.?

T: What is your religious affiliation?

T: What is your wife's maiden name?

T: In what clubs or organizations

T: do you have memberships?

T: What is the name of your minister,

T: rabbi, or priest?

T: What is your maiden name?

T: Are you married?

T: How many children do you have?

T: Who will care for your children

T: while you are working?

T: Do you own or rent your place of

T: residence?

T: Have you ever had your wages garnished?

T: Have you ever been arrested?

T: How many dependents do you have?

T: What did your father do for a

T: living?

T: What do you like to do in your

T: spare time?

T: Do you have any health problems?

T: What kind of discharge did you
T: have from the military service?
T: Can you make arrangements for your
T: children's care during the day?
T: By whom were you referred for a
T: position here?
T: Do you think you have the stamina
T: to do this job?
T: Have you ever been convicted of
T: a felony?
T: That's an unusual name! What
T: nationality?
Q: Now, name at least twelve questions
Q: which you cannot be asked in a
Q: job interview.
A: N
M: What is the date of your birth?
M: Where were you born?
M: Are you a citizen of the United States?
M: What is your religious affiliation?
M: What is your wife's maiden name?
M: In what clubs or organizations
M: do you have memberships?
M: What is the name of your minister,

M: rabbi, or priest?

M: What is your maiden name?

M: Are you married?

M: How many children do you have?

M: Who will care for your children

M: while you are working?

M: Do you own or rent your place

M: of residence?

M: Have you ever had your wages

M: garnished?

M: Have you ever been arrested?

M: How many dependents do you have?

M: What did your father do for a living?

M: What do you like to do in your

M: spare time?

M: Do you have any health problems?

M: What kind of discharge did you

M: have from the military service?

M: Can you make arrangements for your

M: children's care during the day?

M: By whom were you referred for a

M: position here?

M: Do you think you have the stamina

M: to do this job?

M: Have you ever been convicted
M: of a felony?
M: That's an unusual name! What
M: nationality?
L: 12
TY: Great! You know most of the
TY: questions which cannot be asked
TY: in the interview.
J: Q4
L: 11
TY: Good. You name eleven correctly.
JY: Q4
L: 9
TY: Sorry you named only nine. You
TY: should be more familiar with
TY: questions which invade your
TY: privacy and civil rights.
JY: Q3
T: There are certain things to do in
T: the interview which give a good
T: impression. You have three to five
T: minutes to convince the employer
T: that you are the person who can
T: fill the job. Remember you are

T: selling your service. The employer
T: is interested in what you can do
T: for the company. The employer
T: is interested in finding the best
T: person for the job that is open.
T: You are that person and in three
T: to five minutes you must convince
T: him that you are that person.
T: You convince the employer by:
T: being prompt
T: being natural
T: being comfortable
T: not wisecracking
T: not exaggerating
T: being attentive
T: not interrupting
T: understanding questions
T: replying promptly
T: not begging
T: using good English
T: It is necessary that you arrive five
T: or ten minutes early. If you are late
T: for the job interview, the employer
T: will get the idea that you will

T: be late for work. The job will
T: go to someone who was on time.
T: Be natural. Be confident during
T: the interview but don't be cocky.
T: If you are not confident that
T: you can do the job, the employer
T: will not be confident you can do
T: it. Don't apologize for weak-
T: nessess but bring out your strong
T: points. Tell the employer what
T: you can do and what you have done.
T: Be comfortable but don't lounge
T: or sprawl. A careless posture
T: may lead the employer to think
T: you are not taking the interview
T: seriously. Don't wisecrack or make
T: a lot of small talk. The interview
T: is a serious situation. Your
T: attitude should be a business
T: attitude. You are there to sell
T: your service. The employer is
T: there to buy someone's talent.
T: The employer does not want time
T: wasted either in the interview

T: or on the job.

T: Don't exaggerate your experience

T: or abilities..

T: The information on your application

T: and work history will be checked.

T: Give the employer your undivided

T: attention.

T: You have only three to five minutes

T: and you should keep your attention

T: on the interview.

T: Don't interrupt the employer when

T: he/she is talking. The employer

T: will ask the question when the time

T: comes. Listen carefully to what

T: is being asked.

T: Make sure that you understand each

T: question that is asked. Do not

T: answer a question you do not

T: understand. Ask the employer to

T: clarify it. Reply promptly to

T: each question.

T: Don't beg for a job. Don't dwell on

T: the fact you are unemployed. The

T: employer wants someone who can do

T: his job. He is not interested,
T: at this time, about your condition
T: in life.
T: The job interview gives you the
T: opportunity to show the employer
T: you have the necessary qualifications,
T: attitudes, and interests to do the
T: job. Make sure that you are pre-
T: pared for the job interview and
T: that you make a good impression
T: during the interview.
Q: Name six things which you can do
Q: in the interview to convince the
Q: employer that you are the one
Q: for the job.
M: Be prompt.
M: Be natural.
M: Be comfortable.
M: Do not wisecrack.
M: Do not exaggerate.
M: Be attentive.
M: Do not interrupt.
M: Understand the questions.
M: Reply promptly.

M: Do not beg for the job.

M: Use good English.

L: 11

TY: Great! You know the things to

TY: do in the interview to convince

TY: the employer to hire you.

J: *End

L: 9

TY: Good! You named at least nine of

TY: the things to do in the interview.

J: *End

L: 6

TY: Ok You named over half of the

TY: things to do in an interview.

J: *End

L: 5

TY: Sorry. Try again.

JY: Q4

*End. E:

Presentation Disk

Return

Exercise — Career Exploration

T: One of the major worries of teenagers is their
T: future. As early as ninth grade, students become
T: concerned about how they will earn a living after
T: high school. If this question has crossed your mind,
T: you will want to explore career options and match your
T: personal interests, abilities, and educational strengths
T: to the requirements of the various careers.
T: Since there are thousands of jobs available, placing
T: them in career clusters provides a system to make the
T: study of occupations easier. There are many ways to
T: group-or cluster-jobs. This program lesson uses the
T: industry classification system in the Occupational
T: Outlook Handbook. According to this sytem, there are
T: nine career clusters: (1) agriculture; (2) construction;
T: (3) finance, insurance, and real estate; (4) government;
T: (5) manufacturing; (6) mining; (7) service and miscel-
T: laneous; (8) transportation, communication, and public
T: utilities; and (9) wholesale and retail trade. Career
T: clusters are not perfect classification systems.

T: Some job titles, such as mechanic, could fit under

T: more than one career cluster. However, career clusters

T: do give you an approach to the study of the world of

T: work which should make the study more meaningful. The

T: following is an example of a career cluster for

T: agriculture. Notice that there is a great deal of

T: variety among the jobs, but that all are directly

T: related to the agricultural industry.

G: GR

G: HLIN B, C at D

G: VLIN E, F at F

Agriculture *

Ag. Production+	Ag.Supply & Service+	Ag. Mechanics+	Ag. Products+	Ornamental Horticulture+	Forestry
Livestock	Feed Mixer	Mechanics	Pro-cessing Fieldman	Greenhouse	Forestry Aide
Dairy	Seed Cleaner Man	Set-up Man		Nursery	Forestry Technician
Field Crops	Seed Fieldman	Parts Man		Landscape	
Row Crops	Feed Fieldman	Salesman		Garden Center	
Fruit & Nuts	Chemical Fieldman			Golf Course	
				Parks	

* Larry Kenneke, Dennis Nystrom, and Ronald Stadt, Planning and Organizing Career Curricula, 1973, p. 101.

G: Text

Q: Is there only one way to group jobs?

A: N

M: No. This module uses one of the industry classification

M: systems.

T: Jobs may also be grouped according to level of respon-

T: sibility, type of product produced, etc.

Q: Listed are a number of jobs. Under which of the nine

Q: career clusters should they probably go?

Q: a. tool and die maker
Q: b. sales clerk
Q: c. claim adjuster
Q: d. city manager
Q: e. building custodian
Q: f. newspaper reporter
Q: g. bricklayer
Q: h. pilot
Q: i. forest ranger
Q: j. coal miner
Q: k. radio announcer
Q: l. business machine operator
Q: m. railroad conductor
Q: n. county treasurer
Q: o. stockbroker
Q: p. soil conservationist
Q: q. locksmith
Q: r. FBI agent
Q: s. roofer
Q: t. sheetmetal worker
Q: u. electrician
Q: v. teacher
Q: w. loan officer
Q: x. dairy farmer
Q: y. nurse
Q: z. telephone operator

A: N

M: 1. Agriculture - i. p. x.

M: 2. Construction - g. s. u.

M: 3. Finance, insurance & real estate - c. o. w.

M: 4. Government - d. n. r.

M: 5. Manufacturing - a. t.

M: 6. Mining - j.

M: 7. Service & miscellaneous - e. l. q. v. y.

M: 8. Transportation, communication & public utility -

M: f. h. m. k. z.

M: 9. Wholesale and retail trades - b.

L: 26

TY: Excellent. You know the jobs and how they fit in the

TY: career clusters very well.

JY: T

L: 23-25. Very good. You know jobs and how they fit into

L: careers.

JY: T

L: 19-22. OK. You know most of your jobs.

JY: T

L: 0-18. Sorry. Go back and read the jobs again.

JY: Q1

T: Before exploring specific careers, you should determine

T: your definite likes and dislikes. Understanding

T: yourself better can help you narrow the number of

T: career clusters which you will want to explore. After
T: narrowing the total field to two or three clusters,
T: you will then be able to look at requirements of
T: specific jobs.
T: For the next couple of minutes, do a little daydreaming.
T: Imagine yourself at work ten years from today. What
T: kind of activity are you doing? Are you working with
T: people, data, or things? In what type of environment
T: are you working? Are you sitting behind a desk or
T: moving about? Are you working alone or with people?
T: How much responsibility do you have?
T: Now stretch your imagination a bit more. If you could
T: have any job that you wanted, which one would you
T: choose and why? What job would be the one you would
T: least like to have and why?
T: By now you should be thinking of some of the things
T: which are important to you in a job. If you love being
T: active and out-of-doors, you will probably not be
T: happy as a keypunch operator. When considering any
T: job, you should compare the physical, emotional, and
T: educational requirements of the job to what you know
T: about yourself. You will probably spend the major part
T: of your life working. Making informed choices about
T: careers can make the time you spend on a job enjoyable

T: and rewarding.

T: One way to identify jobs that might suit you is to
T: examine what you like to do in your spare time and
T: what you like to study. If, for instance, you enjoy
T: looking through fashion magazines and sewing the latest
T: styles for yourself, a career in clothing design or
T: manufacturing may be for you. There is no reason to
T: believe that you can't earn a living doing something
T: you enjoy. Other things to consider about yourself
T: as you are thinking about jobs are how much independence,
T: variety, security, authority, and movement you want;
T: how important recognition, social status, pay, oppor-
T: tunity for promotion, and a feeling of achievement are
T: to you; whether you prefer to work alone or with a group
T: of people; and how much training/education you are
T: willing to get before full-time employment.
T: Meet Stacey and try to determine a job which meets her
T: interests. Stacey is a seventeen year old high school
T: junior who is involved in school politics, a member of
T: the swim team, a cheerleader, and a B+ student. She
T: has lived on a farm all of her life and takes great
T: pride in the fact that her 4-H projects were awarded
T: blue ribbons at each of the last three state fairs.
T: Her favorite leisure time activities are roller

T: skating with friends and participating in the
T: community theater.
T: Until this year Stacey took the high school courses
T: in English, science and math which would prepare her
T: for studying nursing in college. Now, however, Stacey
T: has become engaged and plans to get married as soon
T: as she graduates. For this reason, Stacey wants to
T: enroll in a vocational training program her senior year.
Q: From what you have been told about Stacey, in which of
Q: the following programs do you think she will choose
Q: to enroll?
Q: a. animal hospital technology
Q: b. secretarial
Q: c. court reporting
A: N
M: a. animal hospital technology
T: Stacey chose animal hospital technology because she
T: enjoys working with animals, the public, and a profes-
T: sional person. The job also makes use of her interests
T: in medicine, math, and science. If she decides on a
T: career in a medical field later, this job training
T: and experience will give her a good background for
T: future study. Stacey is very active. This type of
T: work will allow her to move about and vary her job
T: activities.

T: When evaluating your skills for the purpose of iden-
T: tifying a possible vocation, abilities as well as
T: interests should be taken into consideration.
T: Take a piece of paper and, according to the major
T: ability categories, rate yourself weak, average, or
T: strong in the following areas:
G: GR
G: HLIN B, C at D
G: VLIN E, F at F

Artistic

Clerical (speed and accuracy with detail, numbers, names, and keeping neat and accurate records)

Leadership

Manual (good at doing things with your hands)

Mechanical (good at working with tools and machines and fixing things)

Mental

a. ability to understand ideas expressed in words
b. ability to think about objects in two or three dimensions
c. ability to solve problems logically
d. ability to work with numbers
e. ability to write and talk easily
f. ability to recall past experiences

Musical

Physical

a. ability to walk, carry, reach, lift, etc.

b. coordination

Social (good at getting along with others)*

*Career Education Activities for Middle School Teachers (developed by Central Kansas Career Development Program, Kansas State Department of Education, 1975, p.40.

G. Text

T: Each job differs from others in the types and degrees
T: of abilities required to perform the job successfully.
T: Your strongest and weakest ability areas should always
T: be considered in job selection.

Q: Using another piece of paper, write the letter to
Q: identify the most important ability needed to perform
Q: the following tasks:
Q: 1. Proofread copy for the daily newspaper -

a. social, b. clerical, c. mental

Q: 2. Decorate a store window

a. physical, b. mechanical, c. artistic

Q: 3. Building an engine

a. mechanical, b. artistic, c. mental

Q: 4. Refinishing a table

a. manual, b. physical, c. mental

Q: 5. Designing a suspension bridge

a. leadership, b. mental c. physical

Q: 6. Becoming principal of a school

a. leadership, b. mental, c. social

Q: 7. Selling used cars

a. clerical, b. social, c. physical

Q: 8. Moving furniture

a. physical, b. leadership, c. social

Q: 9. Tuning pianos

a. social, b. manual, c. musical

A: N

M: The answers are b, c, a, a, b, a b, a, c.

L: 8-9 Excellent. You know the abilities needed to perform various jobs.

JY: T

L: 6-7 Good. You are familiar with the abilities required to do certain jobs.

JY: T

L: 0-5 Sorry. Try again.

T: Jobs can be classified according to whether the person
T: who performs the job deals mostly with people, data,
T: or things. When considering an occupation, think about
T: your personality. Are you happiest dealing with people,
T: computing or analyzing information, or working with

T: objects such as machines? If a person is extremely
T: shy, a job requiring public speaking will make him/
T: her uncomfortable and unhappy.
Q: Write the letter to classify the following jobs
Q: according to whether their emphasis would be on
Q: people, data, or things.
Q: 1. Accountant - a. people, b. data, c. things
Q: 2. Social Worker - a. people, b. data, c. things
Q: 3. Police Officer - a. people, b. data, c. things
Q: 4. Painter - a. people, b. data, c. things
Q: 5. Map Maker - a. people, b. data, c. things
Q: 6. Photographer - a. people, b. data, c. things
Q: 7. Travel Agent - a. people, b. data, c. things
Q: 8. Bicycle Repairman - a. people, b. data c. things
A: N
M: The answers are b, a, a, c, b, c, a, c.
L: 7-8 Excellent. You know the emphasis of jobs.
JY: T
L: 5-6 Good. You are familiar with the emphasis of jobs.
JY: T
L: 0-4 Sorry. Go back and try again.
JY: Q2
T: Work and education are interrelated. It would be
T: difficult to name any job in which at least one of

T: your school courses curriculum area, such as English,
T: math, social studies, science, or home economics, is
T: not used to some degree. A carpenter must be able to
T: measure accurately; a secretary must know spelling,
T: punctuation, and filing rules; and a mechanic must be
T: able to read parts numbers and follow the directions
T: on instruction diagrams. Almost everyone seeking and
T: obtaining employment must complete application forms,
T: W-2 forms, time sheets, and health forms. It is a
T: good idea for employees to be able to check the
T: arithmetic involved on their pay stubs to ensure that
T: their pay has been figured accurately.
T: Employers often base promotions or pay increases on an
T: employees academic skills. The abilities of keeping
T: records, communicating clearly (in writing or verbally)
T: with the public, and keeping up with the newest
T: developments in the occupational area are important
T: to the job success. Employers find academic skills so
T: important to the quality of their employees' work that
T: many of them pay their employees to continue their
T: education. Thus, when thinking about job possibil-
T: ities, evaluate which are your best and worst subjects
T: at school. Also consider subjects that you should
T: complete before high school graduation.

Q: Name five jobs that an individual might be able to
Q: get with only a ninth grade education.
A: N
M: Station Attendant
M: Waiter/waitress
M: Janitor
M: Furniture Mover
M: Parking Attendant
Q: What is your guess as to the starting pay for the
Q: jobs you listed in number 1?
A: N
M: Minimum Wage
Q: Where could a person who has dropped out of school
Q: receive more training and education?
A: N
M: Night School
M: Vocational/Technical School
M: Apprenticeship
M: High School
M: CETA
Q: What school subjects might help you if you work at
Q: the following occupations and why?
Q: Truck Driver
A: N
M: (math to fill out log books, social studies to read

M: maps, know directions, know geography of country,
M: recordkeeping to check inventories).
Q: Nurses' Aide
A: N
M: (science to understand normal body functions and first
M: aid; home economics to understand nutrition: math to
M: be able to accurately measure and to be able to read
M: thermometers and gauges; and reading to be able to
M: follow the directions on the chart).
Q: Artist (commercial)
A: N
M: (math to be able to measure accurately and draw angles
M: and circles; science to correctly use chemicals for
M: graphic processes and to understand color; home
M: economics for an understanding of color, texture,
M: fabric, and design; and English for such things as
M: writing captions for art or reading about the latest
M: trends in art).
T: After using self-knowledge about your interests,
T: abilities, and academic skills to narrow job possi-
T: bilities to two or three clusters, the next step is
T: to locate information about specific jobs. You can
T: locate job information in a number of ways. School
T: counselors generally have copies of the Occupational

T: Outlook Handbook and other reference sources which
T: describe work responsibilities, qualifications, salary
T: range, location, environment and predicted number of
T: future openings for thousands of jobs. If you are
T: still having difficulty deciding which jobs to study,
T: counselors can have you fill out interest inventories,
T: such as the Strong or Kuder, to find out your areas
T: of strongest interest before you begin your search
T: through reference materials. Counselors can also help
T: find the answers to questions you have about a particular
T: job such as how to gain entrance into a training
T: program for the job. State employment offices have
T: counselors who can administer interest inventories
T: and evaluate your vocational aptitude. These counselors
T: can help you discover job groupings which match your
T: interests and abilities and give you information about
T: the possibilities of finding employment in the job
T: areas. Employment offices have available to them
T: information about job openings across the country and
T: state. Libraries - school and city - have career
T: materials such as books and filmstrips. Libraries also
T: receive newspapers from several of the largest cities
T: in the United States. The employment opportunities
T: sections of these newspapers can help you identify

T: job classifications and geographic areas.
T: Interviewing persons employed in occupations of interest
T: to you is a valuable source of job information. If the
T: interview questions are well thought out, you can find
T: out about training needed for the job, salary range,
T: other job benefits, promotion possibilities, and the
T: good and bad points of working at the occupation.
T: Writing letters to the chambers of commerce in various
T: cities in which you might like to live can give you
T: information about the job opportunities in those cities.
T: Ask what the labor shortages are in each area.
T: Private employment agencies charge for their services;
T: but reputable agencies are often helpful in evaluating
T: their clients' employment strengths and finding jobs
T: which match those strengths. Often a person does not
T: have to pay the employment agency unless that agency
T: places him/her on a job. Employers contact private
T: agencies when they are having difficulty filling a
T: position. In some cases, the employer will pay the
T: fee charged by the employment agency instead of having
T: the new employee do so. If you are thinking about
T: using a private agency, call several of them and ask
T: about their charges, services, and payment policies.
T: Then select the one that gives the best service

T: for the money.

T: Researching jobs should eventually lead you to a
T: specific job goal. It is very important for you to
T: write down your goal and all of the steps which you
T: will need to take to make the goal a reality. For
T: instance, if your job goal is to be a carpenter,
T: you might plan to --
T: 1. Take mechanical drawing and woodworking in high
T: school - 1981-82
T: 2. Enroll in carpentry at the vocation-technical
T: school - 1982-83
T: 3. Work with building contractor summers and year
T: after graduation for minimum wage and training.
T: 4. Begin work as carpenter - 1985.

T: It is important when making a decision about your
T: career to know what your alternatives are. For this
T: to be possible, you must know as much as you can about
T: yourself and about the world of work. Once you have
T: decided on an alternative that meets your needs, set
T: realistic objectives and timelines for reaching your
T: job goal. Evaluate your progress often and ask a
T: counselor, teacher, or employer for advice if problems
T: arise. Planning career choices may make the difference
T: between enjoying and tolerating your job.

Q: Place the following tasks in the order that they
Q: should be accomplished.
Q: a. Determine steps to reach goal
Q: b. Examine interests, abilities, and educational
Q: strengths
Q: c. Locate job information
Q: d. Set job goal
Q: e. Compare interests, abilities, and educational
Q: strengths to requirements of jobs in career clusters
Q: f. Explore career clusters in general
Q: g. Choose two or three career clusters to research
Q: h. Reach your job goal
Q: i. Match interests, abilities and educational strengths
Q: to particular jobs.
A: N
M: f, b, e, g, c, i, d, a, h.
L: 8-9 Excellent. You know the order of tasks in making
L: decisions about your career.
JY: E
L: 7-8 Good. You have most of the tasks in order to make
L: a decision about your career.
JY: E
L: 0-5 OK. You have some of the tasks in order.
JY: E

L: 0-5 Sorry. Reread the material on making decisions

L: about your career.

JY: Q4

E: End.

Presentation Disk

Return

Exercise — Jobs Simulations

T: How do you make a decision about a career? It is
T: very difficult to make up your mind about a job. The
T: Occupational Outlook Handbook says there are 21,741
T: different occupations and these can be broken down into
T: 35,500 different job titles. That's a lot to choose
T: from. So how do you make a choice?
T: A short answer to the questions "How do you make a
T: choice?" would be: "You consider what influences your
T: life, what kind of person you are, and what opportunities
T: are available to you."
T: For example, if you are a person who easily comes
T: up with original ideas, enjoys activities, such as
T: sketching and painting, and works well independently
T: under the pressure of deadlines, you might consider
T: a career as a commercial artist.
T: A commercial artist creates artwork for television,
T: newspapers, magazines, and signs. The artwork may be

T: paintings, wash drawings, line art, scratchboard,
T: or drawings done in pencil, crayon, or chalk.
T: Often an artist must plan what copy (subject matter
T: and artwork) will go on a page of a newspaper, magazine,
T: or pamphlet. The plan for the page is called a layout.
T: A layout, in order to be effective, must be simple,
T: logically arranged, balanced, and appealing to the eye.
T: All elements within the layout should work together
T: to communicate the intended message.
T: Commercial artists receive their training from
T: colleges, vocational schools, art schools, and other
T: artists. Jobs occur most frequently in large cities,
T: but there are a few jobs for artists in any town large
T: enough to have a local newspaper or advertising agency.
T: One activity that a commercial artist does quite
T: frequently is design a logo for a company or product.
T: A logo is a design that identifies a particular company
T: or product. It is used in place of the products or
T: company's name. The following are logos for Southwestern
T: Bell and Texas Instruments.

G: GR

T: Design a logo for the Webster Electronics Company
T: of Washington, D.C. Use the art materials which
T: accompany this module.
T: Perhaps your creative talents lie in writing rather
T: than in commercial art. If so, there are a variety
T: of jobs that you may be interested in doing. Writers
T: work for advertising agencies, newspapers, government,
T: publishing companies, research agencies, magazines,
T: and numerous other businesses. Some report facts;
T: some develop formal, documented papers; and some use
T: their imaginations to invent subject matter.
T: Writers usually receive their training in a four-
T: year liberal arts college. Colleges offer writing
T: courses in journalism, advertising, fiction, poetry,
T: drama, and non-fiction as well as courses in literature

T: and grammar. Persons who wish to be writers should
T: read a great deal and constantly work to develop
T: their writing technique.
T: Try your skill at writing by completing one of the
T: following activities.
T: 1) Develop a jingle for Peterson's Popping Corn.
T: 2) Pretend you are the editor of a column similar to
T: "Dear Abby". Write an answer to the following letter.
T: Dear _____,
T: I am a sixteen year old girl who is about fifty
T: pounds overweight. I've tried numerous diets, but
T: none seem to work. Because I am heavy, the only time
T: a boy will even speak to me is when he has a question
T: about a homework assignment. I'm sure that if any of
T: them ever took the time to get to know me that they
T: would find that I have much more to offer than the
T: answers to algebra problems. Why is appearance the
T: only thing that is important to boys?
T: Sincerely,
T: Dateless
T: If you enjoy working independently in constantly
T: changing surroundings, you might consider a job as a
T: carpet layer. Carpet layers determine the layout of
T: the carpet in an effort to minimize waste. Then they

T: stretch the carpet and tack it into place. Lifting,
T: bending, and kneeling are required. Carpet layers
T: must learn to work quickly without making mistakes.
T: An incorrect cut can ruin a piece of valuable carpet.
T: Usually a high school diploma is required for a
T: job as a carpet layer. Additionally, an apprentice-
T: ship of a few months to three years is necessary for
T: most jobs.
T: The following task is performed routinely by a
T: carpet layer. See if you have the knack for such
T: calculations.
Q: You need to lay carpet in a family room that is 21
Q: feet by 15 feet and a bathroom that is 6 feet by 5 feet.
Q: Carpet rolls are 9 feet wide and the length specified
Q: by the carpet layer. What length would you order?
Q: Draw a diagram of the layout you would use to install
Q: the carpet. How many square feet of carpet were
Q: required to carpet the two rooms? How many square feet
Q: of carpet did you order so that you could install the
Q: carpet according to your layout? What was the amount
Q: of the carpet waste?
A: #X
M: 345 square feet
TY: Good! The answer is 345 square feet.

TN: No. Review is needed.

T: Some individuals like to be active and out-of-doors.
T: One occupation that allows both activity and fresh
T: air is that of a mail carrier.

T: Mail carriers work outside in all weather conditions.
T: They must be able to walk for several miles each day
T: and to quickly scan all pieces of mail before delivery
T: to make sure that the mail is delivered to the correct
T: address. Mail carriers are Federal employees and are
T: eligible for Federal civil service benefits.

T: Persons wanting to be mail carriers should be high
T: school graduates. Because competition for jobs is
T: keen, additional education is of benefit. Applicants
T: must take the civil service exam for mail carriers and
T: score among the top 5-10 percent to be considered for
T: a job opening.

Q: To test your ability to scan and sort pieces of
Q: mail quickly, assume that the following zip codes are
Q: one piece of mail. In three minutes attempt to write
Q: zip codes in numerical order, beginning with the
Q: smallest number.

Q: 93304 90045 31405

Q: 67114 80907 62223

Q: 72206 06118 46014

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Q:   66055    19701    66617
Q:   94520    20017    40505
Q:   92632    33595    71107
Q:   91745    32216    21210
Q:   33901    96819    02169
Q:   61605    47803    01844
Q:   48217    48915    55430
A:   #X
M:   01844    40505    67114
M:   02169    46014    71107
M:   06118    47803    72206
M:   19701    48217    80907
M:   20017    48915    90045
M:   21210    55430    91745
M:   31405    61605    92632
M:   32216    62223    93304
M:   33595    66055    94520
M:   33901    66617    96819
L:    25-30
TY:  Excellent.  You work well with numbers.
JY:  Text
L:   15-25
TY:  Good.  You can work with numbers.
JY:  Text
```

L: 0-15

TY: Try again.

JY: Text

T: Individuals who enjoy helping people might enjoy
T: a career in a medical field. One job classification
T: in the medical field with excellent employment oppor-
T: tunities is nurse aide.

T: A nurse aide assists nurses in the care of patients.
T: Common job tasks include giving patients alcohol rubs,
T: baths, and meals; and keeping charts on patients.
T: Changing linen and sterilizing equipment are also
T: aide responsibilities.

T: Applicants for nurse aide positions should be strong
T: enough to spend long hours standing, lifting, and
T: carrying. High school graduates are preferred for
T: the jobs because aides must read and carry out written
T: instructions and keep charts. Several area vocational-
T: technical schools offer training for those interested
T: in becoming nurse aides. Training and job experience
T: provide an excellent background for training as either
T: a graduate nurse or licensed practical nurse.
T: Try your hand at a task which might be assigned to a
T: nurse aide. Complete the following chart, using your
T: own pulse rate.

T: Note: To take your pulse, rest your arm, palm re-
T: laxed, on your lap. With your opposite hand, cradle
T: your wrist with the two middle fingers about an inch
T: below the thumb. Move your fingers until you locate
T: your pulse. Count the beats for 15 seconds. Multiply
T: this number by 4 to find beats per minute.
G: GR
G: HLIN B, C at D
G: VLIN E, F at F
Resting Pulse Rate
Pulse Rate After Climbing Stairs (5 min.)
Rating (Use Chart Below)
Number of Minutes Required for Pulse to Return to Normal
G: Text

M: Beats Per Minute After Exercise	Rating Scale
M: 84 - 96	Very Good
M: 97 - 114	Above Average
M: 115 - 132	Average
M: 133 - 149	Below Average
M: 150 - 161	Poor
M: 162 and up	Very Poor

T. If you enjoy working directly with the public and
T: have excellent leadership abilities, a career as a
T: fast food manager may be for you. Managers recruit,

T: hire, train, and promote fast food restaurant employees.
T: They assign and supervise job tasks, order and receive
T: supplies, and figure work schedules and payroll.
T: Graduation from high school is required for a job
T: as a fast food manager. Classes in personnel admin-
T: istration, bookkeeping, and accounting are helpful.
T: In most cases, a person who has worked in a fast food
T: restaurant is hired to train, on-the-job, as a manager.
T: One of the jobs of a fast food manager is to assign
T: job tasks. To promote efficiency, tasks are assigned
T: in an assembly line fashion. Imagine that you are a
T: manager of a restaurant similar to Burger King and
T: that you have twelve employees working during the lunch
T: hour. What tasks would you assign to each of the twelve?
T: Take orders and money? Cook the food? Prepare the food?
A: N
M: 6 take orders
M: 2 cook the food.
M: 4 prepare the food.
T: A career that many individuals think glamorous is
T: a radio or television announcer. Announcers write copy
T: for broadcast over the air. They must also speak
T: extemporaneously on a number of topics, remembering
T: that they are responsible for the accuracy and

T: appropriateness of the information they give. The
T: working hours of an announcer can be very irregular.
T: A person planning to be an announcer should complete
T: high school education, specializing in subjects such
T: as speech and forensics. After graduation, one can
T: attend broadcasting schools, but classes in commun-
T: ication media at a liberal arts college are usually
T: as beneficial. Too, a college degree can open up
T: opportunities for advancement in the broadcasting
T: industry. Besides education, a broadcaster must have
T: a pleasing voice and manner. Appearance is important
T: in television.
T: Choose an event to cover, for example, a basketball
T: game or the opening of a new play. Record your voice
T: on a cassette recorder as you describe the action.
T: Try to continue speaking with a minimum of pauses for
T: five minutes. Play back the recording and evaluate
T: the quality of your voice and your description.
T: Teaching is an occupation which appeals to outgoing
T: persons who enjoy children. Teachers develop curric-
T: ulum, instruct pupils, evaluate pupil progress,
T: sponsor extra-curricular activities, and keep records
T: required by the school district.
T: School teachers in Kansas are required to have a

T: baccalaureate degree from an accredited four-year
T: college. In addition, teachers must complete hours
T: periodically after graduation in order to renew their
T: certificates. Many schools encourage their teachers
T: to work toward their masters degree in evening and
T: summer school.

T: Teachers spend approximately seven hours a day in
T: a classroom. They spend additional time each day
T: counseling students, meeting with parents, planning
T: lessons, grading papers, and helping with school
T: activities.

T: One of the most important tasks a teacher must do is
T: plan a lesson(s) to teach a concept. The lesson plan
T: must have objectives (results the teacher hopes to
T: accomplish), activities which will be completed by
T: the teacher or students in an attempt to accomplish
T: the objectives, and an evaluation component to determine
T: if and how well the objectives have been accomplished.

T: Assume that your objective is to teach a class of
T: five-year-olds the names of the letters in the alphabet.
T: Make up two games that you could use as activities to
T: reach your objective. How will you evaluate the
T: effectiveness of your goals?

T: Do you enjoy talking on a CB, reading maps, and
T: giving directions? If you do, you may enjoy a career
T: as a taxi cab dispatcher. A dispatcher takes calls
T: from people needing a taxi and finds out where the
T: people are and where they want to go. The dispatcher
T: then locates the cab company's drivers and sends the
T: drivers to the customers who are closest to them.
T: When possible, the dispatcher will choose a route for
T: a driver in which he or she can pick up more than one
T: customer. Each route is planned to save customer and
T: company time and money.

T: A person wanting to be a dispatcher should have a
T: high school diploma. Math skills, professional
T: telephone answering skills, ability to consider and
T: choose from among alternatives quickly, and ability
T: to work well with people are important. Training is
T: usually received on the job.

T: Use the map of Lawrence included with this module.
T: The spot marked with a red dot is the location of the
T: taxi company. There are three cabs on duty. All are
T: presently in the company garage. Your job will be to
T: plan the shortest route from the cab driver nearest
T: to the customer to the customer's destination each
T: time a call is received. You must also figure the

T: amount of fare each cab driver should turn in at the
T: end of the day. Use the following method for figuring
T: fares for each driver:

Driver 1

Time of call	Miles from Customer to Customer Destination	X $2.00 per mile =

Total $_____

T: Mark the routes you choose for each cab on the map.
T: Use a green pen for cab 1, a blue pen for cab 2, and a
T: red pen for cab 3. A scale to figure mileage is
T: included in the lower right hand corner of the map.
T: A ruler is available to help you with your estimations.
T: Call 1 (8:05) - Mrs. Smith calls from her house at 2704
T: Alabama. She wants to go to the University Hospital.
T: Call 2 (8:10) - Jill Andrews calls from Lawrence High
T: School. She needs a ride to work at the corner of
T: 9th and Massachusetts.
T: Call 3 (8:10) - Bill Anderson calls from (address).
T: He needs a ride to the airport.
T: Call 4 (8:11) - Joan Smith calls from the county court-
T: house. She needs a ride to Maggie's Pantry on
T: Massachusetts.
T: Call 5 (8:15) - Sara Johnson calls from Hillcrest

T: Shopping Center. She needs a ride to the (address).

T: Call 6 (8:20) - Mark Penner calls from (address). He

T: needs a ride to (address).

T: Call 7 (8:21) - Kathy Sanchez calls from Hallmark

T: Cards. She needs a ride to the Ramada Inn.

T: Call 8 (8:25) - Martha White calls from (address).

T: She needs a ride to (address).

T: Call 9 (8:27) - John Wise calls from (address). He

T: needs a ride to a dentist at (address).

T: Call 10 (8:30) - Kelly Landon calls from the (address).

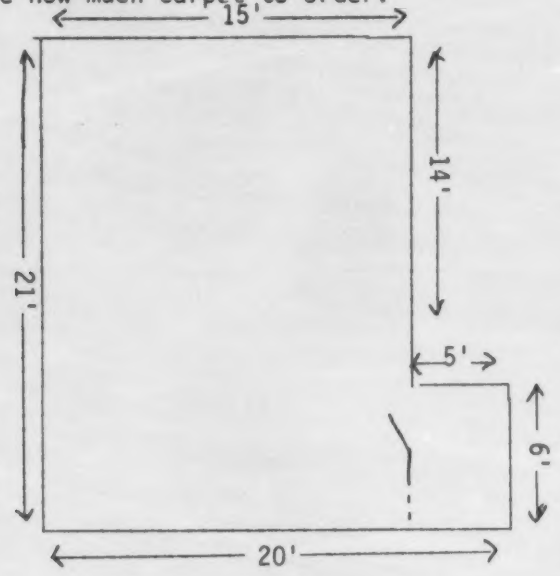
T: She needs a ride to (address).

E: End.

#1. Draw a logo for Webster Electronics Company on this page. Use a pencil, if possible, so you can erase if you make a mistake.

#2. Use this paper or your own to write either:
1) A jingle for Peterson's Popping Corn OR
2) Answer the 'Dear _____' letter on the computer.

#3. You need to lay carpet in a family room that is 21 feet by 15 feet and a bathroom next to the family room that is 6 feet by 5 feet. Carpet rolls are 9 feet wide and the length specified by the carpet layer. Look at the diagram and use this page as scrap paper to figure how much carpet to order.



#4. Nurse Aide: Chart to Find Pulse. Count your pulse for 15 seconds and multiply by 4 to find your pulse per minute.

Beats Per Minute After Exercise	Rating Scale
84 - 96	Very Good
97 - 114	Above Average
115 - 132	Average
133 - 149	Below Average
150 - 161	Poor
162 and up	Very Poor

#5. Teacher: Write 2 games that could be used to teach 5-year-olds the names of the alphabet.

APPENDIX C

A List of Advisory Board Members

ADVISORY COMMITTEE - A MUST

Committee Composition: counselors, teachers, students, parents, administrators, influential community members

Characteristics Considered in Selection

interest in the program

ability to generate enthusiasm for the program

willingness to serve on committee

recignized leadership in the school and/or community

ability to work effectively in a group situation

time to devote to serving on the committee

ability to assist in accomplishing committee tasks

ability to solve problems

ADVISORY BOARD

ALMA

Burbach, Judy Alma USD 329 Wabaunsee Co. Maple Hill, Kansas 66507	Librarian	663 2450
Harms, Jr., Mrs. Arthur Box 44 Maple Hill, Kansas 66507	Parent	663 2543
Imphurn, Julie Maple Hill, Kansas 66507	Student	663 5439
Weems, Jo Alma USD 329 Wabaunsee Co. Maple Hill, Kansas 66507	Counselor	663 2450

ADVISORY BOARD

MCLOUTH

Campbell, James Principal McLouth High School McLouth, Kansas 66054	Principal	796 6121
Ms. Laura Hicks Instructor McLouth High School McLouth, Kansas 66054	Instructor	796 6121
Stice, Sharon 909 West 29th Lawrence, Kansas 66044	Counselor	796 6121
Gene Dillard Instructor McLouth High School McLouth, Kansas 66054	Instructor	796-6121

LAWRENCE

Ms. Linn Anderson 823 Vermont Lawrence, Kansas 66044	President, Chamber of Commerce
Mike Browning Lawrence Unified School District 2017 Louisiana Lawrence, Kansas 66044	Guidance Administrator
Gordon Jacob, Jr. Lawrence Unified School District 2017 Louisiana Lawrence, Kansas 66044	Student
Edith Leonard Lawrence Unified School District 2017 Louisiana Lawrence, Kansas 66044	Foreign Language
Ray Wilbur Lawrence Unified School District 2017 Louisiana Lawrence, Kansas 66044	Chairman, Math Department

ADVISORY BOARD

SOUTH JUNIOR HIGH SCHOOL

Bartley, Joyce 524 Boulder Lawrence, KS 66044	Instructor	843-6407
Bly, Lois 2813 Alamba Street Lawrence, KS 66044	Instructor	843-8010
Escer, Rita 321 Funston Lawrence, KS 66044	Instructor	842-0680
Hyler, Linda 3027 Toamhawk Lawrence, KS 66044	Instructor	842-8990
Johnston, Penny R.F.D. 2 Lawrence, KS 66044	Student	843-6628
Marty Bragg 1900 W. 31rst Lawrence, KS 66044	Parent	843-6464

ORGANIZING FOR ACTION

1. Select Advisory Committee
2. Develop agenda and time for first meeting
3. The first meeting - suggested topics/agenda

RATIONALE FOR MICRO COMPUTER PROJECT

To reinforce as well as to increase the micro computer understandings of committee members. Provides a good starting point for the meeting.

BACKGROUND READING

To help those committee members who may desire to further improve their understandings of micro computers. Provide selected readings from the National Literature Search as a suggested starting point.

ROLES AND RESPONSIBILITIES

To help the advisory committee understand its role and responsibilities especially with regard to planning and implementing a comprehensive Career Education Micro Computer Project. Gives committee members a set of individual perspectives.

STRUCTURE/CONTENT FOR SUBSEQUENT MEETINGS

To facilitate the work of the advisory committee it is necessary to establish concrete plans for further activities for the committee.

QUESTIONS AND ANSWERS

Self explanatory

ADVISORY COMMITTEE: TECHNIQUES FOR MEETINGS

Sample Learning Activities

Brainstorming

In brainstorming, participants spontaneously express their thoughts about a specific problem--it is a let-yourself-go session that calls for ingenuity and creativity in seeking a solution to a problem. Brainstorming is used to elicit both numerous and unique ideas.

Case Study

The case study provides a description of a realistic situation that the workshop participants are encouraged to consider and for which they resolve problems as if they were personally involved. There are numerous problem situations related to planning, implementing, and evaluating the micro computer project that can be presented to committee members.

Demonstrations

Demonstration is the procedure of doing something in the presence of committee participants either as a means of showing them how to do it themselves or in order to illustrate a point. The Project Director should be sure that the demonstration meets a necessary instructional need. The effectiveness of this instructional technique depends on the members having a clear view of what is being presented.

Group Discussions

There are two basic types of group discussion--structured and unstructured. Structured group discussions are characterized by adherence to a topic or a problem for which the participants want to arrive at a decision or conclusion. This type of discussion is generally directed by the Project Director.

In-Basket

This technique is used to develop decision-making skills which focus on participans' abilities to set priorities and carry out tasks. Workshop participants are asked to assume the roles and responsibilities of

specific board members. They are provided written information in memo form about a number of tasks that they must complete. Committee participants must determine which tasks they would attend to and in what order.

Role Playing

Role-playing is an instructional technique in which committee members assume roles other than their own. During the meeting, structured settings are described and participants have the opportunity to express feelings, work out problems, and experience other persons' roles.

The objective of a role-playing situation might be to suggest alternative solutions to a problem, to gain an understanding of another's feelings, or to gain an experience in new situations. The situation should be clearly presented to committee participants.

Simulation

A simulation is a representation of significant or central features of reality that requires the participants to become actively involved in an experience rather than merely witness it. Simulation is a broad term and includes many techniques such as in-basket, case study, and role-playing.

Symposium

A symposium consists of a group of brief presentations on various aspects of a particular issue or problem. Generally, after the prepared presentations, speakers participate in a panel discussion and/or answer questions raised by committee participants.

ADVISORY COMMITTEE MEMBERS

	Name	Agency	Position	Address	Phone Number
				912 Missouri	765
1	Judy Buchach	Wabaunsee High	Librarian	Alma Ks 66401	3315
2	Mary Harms	" "	Parent Rep.	"	"
3	Julie Arthurs	" "	Student	"	"
4	Jo Weems	" "	Comm Co-Ord	"	"
5	James E. Campbell	McLouth H.S	PRINCIPAL	MCLOUTH	796-6123
6	Rita Fisher	SJH	READING TEACHER	321 FUNSTON AVE	843-6628 TOPEKA KS
7	Laura D Hicks	Melvern High School	Business Ed Teacher	317 Summit McLouth, KS 66054	796-6123 796-6630
8	Penny Johnston	SJHS		Route #2	843-6628
9	Sharon Stice	McLouth H.S.	Counselor	McLouth, KS 66054	796-6123
10	Edith Leonard	L.H.S	teacher	L.H.S.	842-6222
11	Raymond H. Wilbur	LHS	teacher	LHS.	842-6222
12	Lois Ray	South	Teacher	South	843-8010
13	Mary Bracco	SJHS	Parent	1900 W 31st H-24	843-9096 work 843-6462 home
14	Linda Hyden	South	Teacher	3027 Tomahawk Dr.	842-8490
15					
16					

	Name	Agency	Position	Address	Phone Number
17	MIKE BROWNING	LHS	SUPV. SCHL SER.	19TH LA.	842-6222
18	Ernest Coleman	497	Federal Programs	2017 LA.	842.6222
19	Jacob U. Gordon II	LHS	Student	3505 W. 10th Terr	842-2099
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

October 21, 1980

Dear Educator:

I would like to invite you to serve as a member of the Project Advisory Council for the project which is described on the enclosed page.

Your interest, input, and expertise would lend a great deal to the success of this project. Other members will be from the Lawrence, Alma, and McLouth School Districts.

The purpose of the Project Advisory Council is (1) to provide recommendations and support (2) To provide continuous feedback on the progress as seen from the Advisory Council member's viewpoint (3) To encourage collaborative efforts between schools involved in the project (4) To provide information concerning techniques, skills, and future career needs of the community and of parental concerns, so that the program can be continually updated (5) To assist with dissemination of information concerning our activities (6) To develop positive school and community relations.

The Project Advisory Council will meet approximately every two months. Additional meetings will be called as necessary. Provisions have been made to provide for your travel expenses.

I hope to hear from you in the very near future and I do hope that you will decide to work with us in this very worthwhile project.

Sincerely,

Hazel Rockhold, Project Coordinator

ORIENTATION SESSION AGENDA

Date _____

Time _____

Place _____

1. Introduction of members
2. Rationale for Micro Computer Program for career education
3. Background reading and additional sources of information
4. Roles and responsibilities of the Advisory Committee and its members
5. Structure for subsequent meetings
6. Questions and concerns

(Refreshments should be available throughout the meeting)

APPENDIX D

THE MICROCOMPUTER COURSEWARE REVIEW AND RATING FORM

1. Date____/____/____

2. Name of Program_____

3. Number of programs reviewed:_____

4. Reviewer's Name_____

5. Suggest the title of course(s) for which this material is appropriate. For example: math, reading, business, physics, etc.

_____ _____

_____ _____

6. Is the information important? ____yes ____no

7. Is the material valuable? ____yes ____no

8. Is the material sexist? Racist? Bias? ____yes ____no

9. Indicate the appropriate instructional level(s) for use of this disk.
____Primary ____Elementary ____Junior High ____Senior High

10. Is it feasible to use the computer with this package to help teach/ learn the material (or can you see a more efficient or effective way)?

_____

11. Does the package make use of the motivational devices of:
Timing _____yes _____no _____not sure
Scoring _____yes _____no _____not sure

12. Personalization: (informal, conversational, address student by name)
_____yes _____no _____not sure

13. Is the length appropriate? _____yes _____no

APPENDIX E

YOUR FIRST DATE WITH A MICROCOMPUTER

the Radio Shack [TRS-80] and Apple models

Using the Microcomputer

Kansas State Department of Education
Vocational Equity/Vocational Education Administration
Corena Nook, Program Specialist

An Agreement for Services With
USD 491/Eudora High School
Gerald Tilley, Principal
Mrs. Janet Rockhold, Project Director

Minicomputer and Microcomputer

The microcomputer revolution is upon us. The microcomputer is one of the most useful, reliable technological advances available to education. First of all, do not confuse the microcomputer with the minicomputer. The distinction is critical.

The minicomputer is simply a smaller version of the computer, utilizing the same peripheral devices and programming languages as the computer. The microcomputer is based on microchips (very dense packages of electronic circuitry about the size of postage stamps) which are placed on a circuit board. It operates slower and can do less than the minicomputer, but it costs less to buy or rent, provides immediate feedback, and is easier to operate.

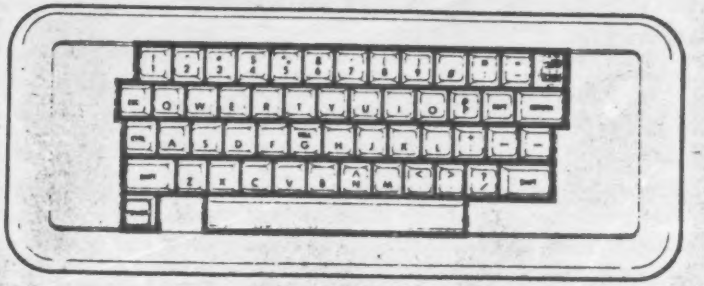
The microcomputer is easy to operate because it uses a programming language called BASIC. This BASIC language allows people to communicate with the microcomputer using simple English words of five letters or less. While most of the various brands of microcomputers use this same language, each model has slight differences in how it responds to the language. An example, the microcomputer tells the operator it is ready to go to work by printing a signal on a television-like screen. Some computers use the word READY for this signal, others use OK, and one model prints an asterick.

It is suggested that as the reader progresses through this manual, the steps should be tried out on a microcomputer. It is very difficult to learn how to use a microcomputer without actually using a microcomputer just as it is difficult to learn how to drive a car by reading a book. This manual speaks to the Radio Shack (TRS-80) microcomputer and the Apple microcomputer.

The Parts of the Microcomputer

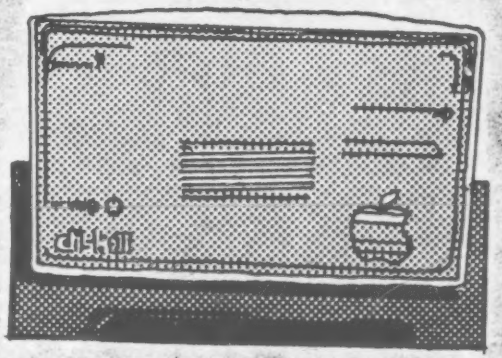
Microcomputers consist of three basic parts:

1. A keyboard



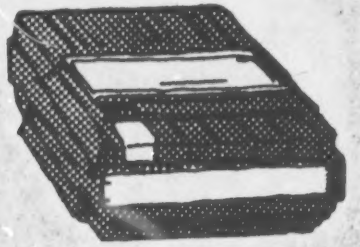
Information is entered on a keyboard. It is then transmitted to the computer's brain, which is the electronic circuitry inside the keyboard.

2. A video display screen.

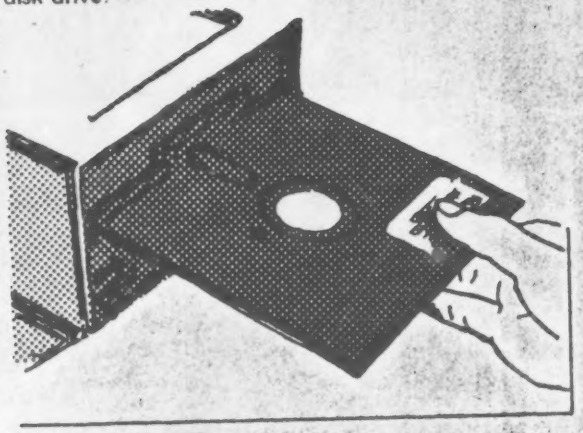


The brain transmits the information to a video display screen so that the operator may see what is happening.

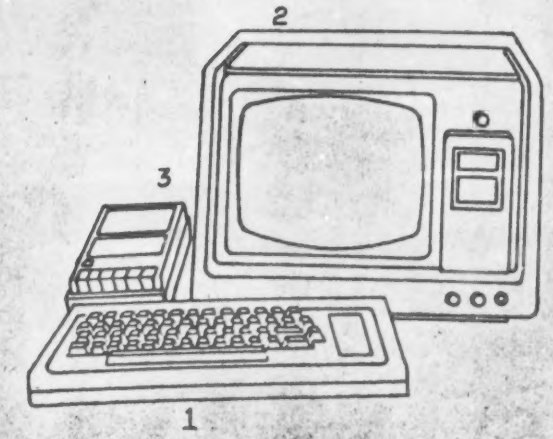
3. Cassette tape recorder . . .



or a disk drive.



The information in the computer's brain may then be sent to the storage devise (the tape recorder) to be recorded for use at a later time. Altogether the microcomputer appears like this.



There are some basic operating procedures for a microcomputer that the reader should be familiar with. The best way to learn these procedures is to sit down at a microcomputer and run it. It is assumed that the microcomputer has been connected together following the instruction in the owner's manual. Only then can the microcomputer be turned on.

How to Turn on the Microcomputer

The switch is on the back of the microcomputer next to where the power cord plugs in. When it is pushed to the upward position, the power light at the bottom of the keyboard comes on. If the microcomputer is a Radio Shack (TRS-80), the word READY and a blinking square called the "cursor" (◄ –) will appear on the video screen. If the microcomputer is an Apple, the title "Apple" will appear at the top of the video screen along with a] and a cursor. If the Apple microcomputer uses the disk drive instead of the tape recorder, turning the microcomputer on will result in a few clicking noises followed by a soft whirring sound, and a red light labeled IN USE will come on. The whirring noise will continue until the RESET key on the keyboard is pressed. The title "Apple" will disappear, and the prompt and cursor will appear at the bottom left of the screen.

The Keyboard

The keyboards for both the TRS-80 microcomputer and the Apple microcomputer are similar to the standard typewriters. Four major differences should be noted:

1. There are no lower case letters, only capital letters.

2. There are two SHIFT keys, so the keyboard can have twice as many characters with the same number of keys. When a key which has two symbols on it is pressed, the lower symbol appears on the screen. If the same key is pressed while either of the SHIFT keys is held down, the upper symbol will appear on the screen.

3. There are other symbols that are not on a standard typewriter, for example the ESC key, which means ESCape. After the ESC key is pushed, an "at" sign (@) is made by shifting the key marked "P". Then the contents of the screen completely disappear.

Another key that is not usually found on a standard typewriter is the REPT which stands for "REPeaT". When the REPT key is held down, any other key that is pressed makes that key's character appear repeatedly on the screen.

4. The RETURN key on the keyboard is not the same as the "carriage return." On the Apple microcomputer, it causes the blinking cursor to "return" to the video screen's left edge as well as give a special message to the computer.

Cassette Recorder

Both the Radio Shack (TRS-80) and the Apple microcomputers use either a cassette recorder or a disk drive. On the Apple microcomputer and recorder, when the RETURN key is pressed, the right hand square bracket and the blinking cursor will appear on the screen's left edge to indicate that the volume control on the tape recorder can be set. The right volume for putting the tape's information into the microcomputer is a trial-and-error method. When the volume is just right, it will say so with a beep.

After the RETURN key is pressed, the cursor will disappear. Nothing happens for ten to 20 seconds. Then the Apple beeps, indicating the tape's information has started to go into the computer. After some time, depending on how much information was on the tape, the Apple beeps again and the prompt character and the cursor reappear. After the tape recorder is stopped, the tape should be rewound. The tape recorder is no longer needed, for the information has been transferred and the program is ready to execute. All attention is focused on the keyboard; RUN is typed and the RETURN key is pressed. The program then will start.

Caution should be taken to ensure that the loaded tape is in BASIC computer language. The results of loading a tape in the wrong computer language in the Apple microcomputer are unpredictable. It is possible to have strange error messages and odd characters appear on the video screen or to lose keyboard control. If this happens, the microcomputer should be turned off and then back on again to get everything back to normal.

To play a tape on the Radio Shack (TRS-80) the volume control should be set in the middle level, approximately 4. After the PLAY key is pressed, CLOAD should be typed. Pressing the command key ENTER starts the tape in motion. An asterick will appear on the screen; a second asterick will blink, indicating the program is loading. When loading is done, the Radio Shack (TRS-80) automatically turns off the recorder and flashes READY on the screen. RUN is typed on the keyboard and the ENTER key is pressed. The program will then start.

Disk Drive

If the microcomputer uses a disk drive rather than a cassette, then the initiation of a program is much quicker and easier. However, care must be taken because disk drives and diskettes are very delicate. The drive door on the Apple microcomputer is opened by pulling outward on its bottom edge. The diskette is then slipped into the slot **with the label upwards.** The edge of the diskette with the oval cutout in the diskette's square plastic cover should enter the drive **first.** The edge of the diskette with the label should enter the drive **last.**

The diskette should be entirely in the drive. If it is pushed too hard, the diskette can be permanently damaged. The drive door is closed by pushing it down again. The two metal fingers, which can be seen inside the slot when the drive door is closed, should just clear the diskette as the door closes.

A diskette is removed by opening the drive door and pulling the diskette carefully out of the drive. The act of opening the disk drive door lifts the "head" off the disk. If the diskette is to be left unused in a drive for a few hours, it is a good idea to open the door so the head will not rest on the diskette. A diskette should never be removed while the drive's "In Use" light is on. This may permanently damage the diskette and is almost sure to destroy the information on it.

Diskettes should be treated with respect. When a diskette is not in use, it should be kept in the paper pocket it came in. These pockets are treated to minimize static build-up which attracts dust. Diskettes should be kept free from scratches, fingerprints, grease, and dust; they should be kept away from magnetic fields, such as electric motors and magnets, and out of extreme temperatures. Diskettes are extremely delicate and should be treated with care.

There are several ways to initiate the program on the diskette. One way is turn the Apple microcomputer off and on again. The disk drive's red "In Use" light will come on, and the drive will make the same whirring and clicking noises it made when the Apple microcomputer was turned on for the first time. This time the disk drive will stop whirring on its own. When the whirring stops and the red light goes off, the title Apple will disappear and a message will appear. The right-hand square bracket and the blinking cursor that appear at the bottom left corner of the screen indicate that the microcomputer is ready for instruction.

The last procedure that the reader needs to be familiar with is how to talk to the microcomputer. As noted before, information is put into the computer by typing on the keyboard. The video screen will display whatever is typed. If a word is misspelled, the error may be erased by pressing the "back space" key (←), which will move one space to the left erasing letter by letter. The spelling may then be corrected.

The microcomputer will not respond to the information that has been typed in until the ENTER key (TRS-80) or the RETURN key (Apple) is pressed. This allows corrections to be made to any line that has been typed until the ENTER or RETURN key is pressed. Microcomputers are very obedient about following instructions, but they must be told precisely in their specific language exactly what they are expected to do. The READY and the prompt cursor which appear below the information on the Radio Shack (TRS-80) microcomputer indicate that it is waiting for its next instruction.

The video screen can become quite crowded with information. To erase the screen on the Radio Shack (TRS-80), the "clear" key is pressed. This key is used at the discretion of the operator. Clearing the screen on the Apple microcomputer requires holding down the SHIFT key while pressing the ESCAPE key and the ? key.

Accuracy should be emphasized. Accuracy is very important if the microcomputer is to run properly. The punctuation has to be the correct microcomputer signals. An entire program will function incorrectly, or not at all, if a comma is used instead of a semi-colon. Human beings can interpret what is meant by a statement if it is incorrectly phrased or poorly punctuated. Computers will not.

If problems of communicating with the microcomputer are encountered at any time in the process of the program, the switch on the back of the microcomputer should be pushed to the downward, or off, position. This clears the program. Then the operator should turn the microcomputer back on and start from the beginning.

Thus with the familiarity of the preliminary procedures contained in this guide, the reader is ready to use the microcomputer on programs that have already been created.

Kansas State Department of Education
Kansas State Education Building
120 East 10th Street Topeka, Kansas 66612

APPENDIX F

Evaluation Forms

SUMMARY EVALUATION

1. Level of interest:

   very interesting A B C D E uninteresting

2. Ease of use

   easy to use A B C D E awkward

3. Educational content and/or value:

   much A B C D E little

4. Program polish

   well done A B C D E amateurish, sloppy, incomplete

5. Instructions

   very clear A B C D E none

6. Use of graphics:

   excellent use A B C D E none

7. Program responds differently for good students and poor students.

   a great deal A B C D E no difference

8. Overall value:

   every school should have this program A B C D E Not worth the effort to load it

District 497 staffers chart computer education plan

(Staff photo by Suzanne Burdick)

Linn Suderman, standing, and Hazel Rockhold, two Lawrence School District 497 career consultants, work on a project designed to introduce students to microcomputers and to show them career options that involve computers.

By DAVID TOPLIKAR
J-W Staff Writer

When the Pilgrims first celebrated Thanksgiving, their children probably learned how to spell the word "turkey" on a small, hand-held writing slate.

Today's children also are learning how to spell the name of the holiday bird on hand-held instruments — beeping, talking computer toys.

Because computers are rapidly invading homes and businesses, local educators are planning ways to give every student a chance to learn how to fit into the computer world.

Two Lawrence School District 497 career education consultants, Linn Suderman and Hazel Rockhold, are working on a research project designed to teach students how to fit into the growing computer world.

"WE KNOW that one out of every six homes will have a microcomputer by 1985 and that 50 percent of them will have them by 1990," Mrs. Suderman said.

"They seem to be the most popular item in demand for Christmas presents this year," said Mrs. Rockhold.

The project is being funded through the Kansas Department of Education and the Lawrence school district. The state will provide $45,790 and the district will pay $6,165.

One of the main purposes of the project is to provide students in isolated areas in the state — such as rural schools — with some microcomputer knowledge.

After the Lawrence project is completed, it will be shared with other school districts across the state.

The consultants are working with Lawrence High School, South Junior High School, Wabaunsee High School in Alma and McLouth High School.

Although all the local junior highs were originally to be involved in the project, the state allotted money for only one local junior high, Mrs. Suderman said.

SOUTH WAS PICKED because it has the greatest number of rural students and because its staff has experience in microcomputers, she said.

"We'll take programs developed for career education in the high school and junior highs and will adapt them to the needs of rural schools," she said.

One of their objectives is to locate written material about how microcomputers are used in education and career education.

"We may have done the most comprehensive search ever done on finding out about other career programs (that use computers)," said Mrs. Rockhold, who will direct the program.

After they get the material together from all sources around the country, the consultants will integrate it into their own project.

Another objective is to develop and implement microcomputer programs on several career subjects. A computer program is a set of numbered instructions designed to perform a particular computer job run.

STUDENTS WILL be able to sit down at a computer terminal and learn about topics such as career exploration, job opportunities, job interviewing techniques and life-planning skills.

The programs developed by the project will be used to enhance the Kansas Computerized Career Information System, which is still in the planning stage.

The project also is intended to develop computer programs on the topics of career awareness and values, self-concept, work attitudes, decision-making and "pre-vocational" skills for two junior highs in 1981-82, if funding is provided.

News & Notes

USD 497 **Lawrence, Kansas 66044** **October 1980**

Career Ed. uses microcomputer

"Because of a new research project, USD 497 secondary students will have the opportunity to learn how to use microcomputers," said Dr. Linn Suderman, Career Education consultant.

The project is being funded through the Kansas State Department of Education (KSDE) and USD 497. KSDE will be providing $45,790 and the District $6,165.

"The microcomputers will be used to help teach career awareness and values, self-concept, work attitudes, decision-making and prevocational skills for secondary 7th-12th students," Dr. Suderman explained.

Students in USD 497 will not be the only students involved in the study. McLouth and Alma students will also participate. That is because part of the project's goal is to develop career and vocational materials that are particularly appropriate for rural students to use.

"Many smaller school districts, such as McLouth and Alma, look to USD 497 for assistance in developing their Career Education curricula. We've been involved in Career Education for 10 years now. We were even chosen by KSDE to write the state's guidelines in this field," Dr. Suderman said.

She said that the project will be taking the District's experience, combining it with materials gleaned from other states, and then will write computer programs that will help students learn more about career and vocational education.

The project will be directed by Hazel Rockhold. She will be assisted by a trainer/programmer yet to be hired.

"This program will not be a job information retrieval system. That's another project," Rockhold said. "What we'll be doing is using the microcomputer as a teaching tool to simulate job-related experiences," she added.

South Junior High was the junior high selected for the project because according to Dr. Suderman, it has the greatest amount of students bused more than 2½ miles.

"That means that SJHS is our most 'rural' school. South also had a staff that has experience in microcomputers. We wrote our proposal to include all three junior high schools, but the state said only one could participate," Dr. Suderman explained.

Most of the emphasis of this first year will be developing programs for the high school students. If the project is refunded for next year, the junior high curriculum will get more attention," Dr. Suderman said.

Both Dr. Suderman and Rockhold are excited about the project's prospects.

"It is really innovative. If we do a good job, it could be an exemplary program for other schools and states to follow," Rockhold said.

The Microprocessor as Pencil

John D'Angelo*

Editor's Note: *Mr. D'Angelo's article was presented at the annual AEDS meeting in Detroit and was chosen one of the finalists for the Best Presentation Award.*

– DTK

The Microprocessor as Pencil!

Not too many years ago that indeed would have been a strange topic. However, we have progressed rapidly during the last few years. This item, the microprocessor, has become quite an ordinary thing.

Recently I had the occasion to revisit Marshall McLuhan, who surprisingly enough, has been all but forgotten, even in this time of increased use of technology. Although he was not specifically referring to education, McLuhan said,

> *"History is made up of three stages: (1) Preliterate or Tribal, in which men lived close together and communicated orally; (2) the Gutenberg or Individual Stage in which men communicated by the printed word and thinking was done in lineal-sequential patterns; and (3) the Neo-Tribal or Electric, in which computers, television and other electronic communication media have moved men back together ("implosion").*[1]

It is interesting to note that in education we have scarcely moved into the Neo-Tribal electric stage while society, at least according to McLuhan, has.

Books and books with pages and pages have been written relative to the whys and wherefores of the introduction of an innovation, technological or otherwise. Therefore, I will not belabor the point. Practically every study at some point or another in the study will place the success or failure of an innovation on whether or not the practitioner, i.e., the teachers were involved and participated in the decisions made before, during and after the innovation's introduction. The key to the involvement is in the decision-making process used in deciding on the innovation. The practioneers must be part of the process before the change is even considered, since they are the ones who will actually implement the innovations. The only way to logically accomplish this is to have a system in place for allowing teacher input into the school's decision-making process. However, that's a topic of another paper.

WHAT IS A MICROPROCESSOR?

Perhaps it is appropriate at this time to define the microprocessor. In the sense we are using it, the microprocessor is the central chip used to process the data supplied. Used in this way it might also be considered a computer-on-a-chip. Therefore, this whole paper could have been entitled "The Computer as Pencil." To be more specific, we might say that the microprocessor chip consists of an extremely miniaturized, reduced version of several integrated circuits which are capable of processing large amounts of data at rapid speeds. The integrated circuits are devices which consist of several hundreds of transistors. A large computer consists of many integrated circuits, whereas the microprocessor may consist of a single chip. The trade-off for size is speed and user capacity.

"in education we have scarcely moved into the Neo-Tribal electric stage, while society, at least according to McLuhan, has."

Without spending too much time investigating, one can very easily say that not a day goes by that each of us does not come into contact with an item which uses the microprocessor. The first of these was the hand-held calculator. Very few homes are without one, and many homes have several. The calculator is built around the microprocessor chip. The microwave oven's microprocessor provides you with the capability of cooking at more than one temperature, different times, or a combination of these. Cameras, TV sets, video tape recorders all have one or more such chips. Many of the newer cars have a microprocessor as part of the ignition system, the exhaust system, or the fuel system. In the latter case, its main purpose is to monitor the amount of fuel needed in relation to the particular driving conditions.

MODIFICATION OF THE TEACHING/LEARNING PROCESS

As was pointed out by McLuhan earlier, the delivery system of education has changed very little during the past 500 years. By the delivery system, we are referring to the process by which we teach, coupled to the process by which students learn. This combination becomes the process of education, i.e., the delivery system of education. With the advent of the printed word, the delivery system changed radically from the Socratic system of verbal transmission of "learning" based to a great extent on the personality of the instructor, to the more concise, formal, impersonal approach of the book. An excellent analogy is presented by Dustin Heuston of WICAT. He states,

> *"Educational leaders have found themselves trapped in a position similar to the one in which*

*Corporate Engineering Center, Texas Instruments, Inc., Dallas, TX

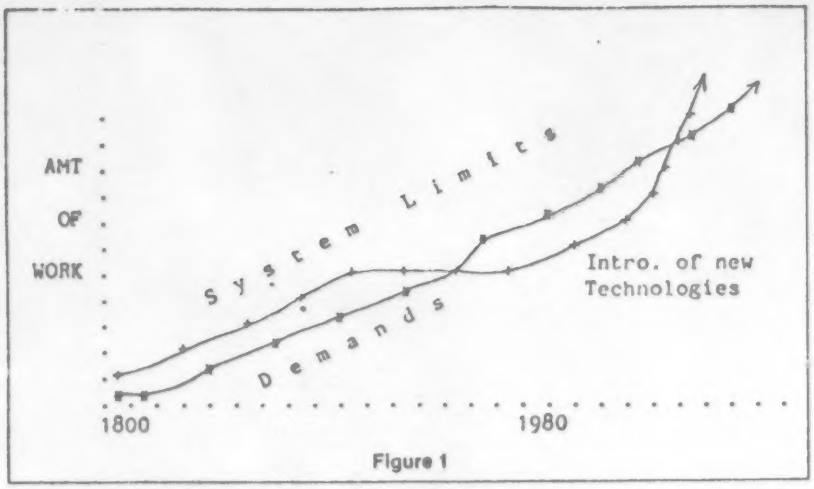


Figure 1

transportation experts might have been had they been forced to improve an old delivery system (the horse) without transitioning to new ones (the train, car, and plane). A horse can do only a limited amount of work, and experiments which attempted to improve breeding or dietary practices, or even use titanium shoes, were simply not going to produce adequate productivity gains."[2]

For at least the past twenty years that I've been in education, we have pumped millions of dollars into the education system of the United States, only to find that achievement scores have gone down! As our work force has increased and become much more sophisticated, the demands on the education system have proportionally increased. As a result of this awareness, we have made many attempts to "meet the needs of our students". But, like the transportation system of 100 years ago, the present delivery system of education is no more capable of the desired level of productivity than was the horse. We have made attempts to rectify this situation. We have added language labs, hundreds of overhead projectors, and even computers to duplicate the present delivery system, all to no avail. The scores are still going down! Again allow me to reiterate, there is the very real possibility that the education delivery system has reached its maximum productivity even with all the "innovations" which have been added. We might portray this graphically as follows in Figure 1.[3]

"...we have pumped millions of dollars into the education system of the United States, only to find that achievement scores have gone down!"

It can be readily seen that the education delivery system has kept pace with its demand until only the past thirty or forty years. It has also been during the last thirty or forty years that we have tried desperately to make modification without changing the basic delivery system.

I must be quick to point out that my comments regarding the present education system are in no way intended to be critical of the many excellent projects and programs or of the valiant attempts which have been made to improve the system. It is simply that the system has reached maturity. We have infused the system with much "technology" in the form of audio-visual equipment and its accompanying software, but even this has not made a significant difference. Perhaps the reason for this has been that the instructional process has continued to be serial in nature. That is to say, the student has had little opportunity to branch to an alternative point in the instructional process. It is not that we educators have not had a sincere desire to do this, but desire and good intentions have not been enough. The technology has not been available prior to the last few years.

We have even had available to us the so-called Instructional Development Process, by which we can approach instruction in an orderly, systematic fashion. This process has not met with much favor by the teachers and administrators of the education establishment. What most instructional developers have not realized is that they have inadvertently been asking to replace, or at least change the present delivery system. Anything else makes them extremely uncomfortable and rather insecure. Part of our failure, as instructional developers, and I include myself among their numbers, is that we have asked that, in order to meet the student's need, material be accessed randomly, while the technology to do so has not been available.

In their book, "Teaching Students Through Their Individual Learning Styles: A Practical Approach", Rita Dunn and Kenneth Dunn enumerate eighteen learning styles and nine elements of teaching style.[4] They, along with most traditional curriculum developers (as opposed to instructional developers) fully expect the classroom teacher to cope with these many combinations. This becomes a management nightmare. Most educators usually dismiss this idea as "pie-in-the-sky", i.e., The Impossible Dream. This dream can be summed up in two words — Individualized Instruction! For educators this has become a sacred concept, like the flag, apple pie, and motherhood.

"What most instructional developers have not realized is that they have inadvertently been asking to replace, or at least change the present delivery system."

It might well be that, like trying to improve on the horse instead of moving on to the airplane, we are trying to improve on the pencil. Rather than attempting to make pencil lead so that it will not break quite so easily, why not use something else as pencil? Then will the impossible dream become not quite so impossible? Are we, in all our wisdom, so bent on improving that pencil, that we have lost sight of the possibility that there may be another way of accomplishing the same end? It's the old forest for the trees bit! The impossible dream is that we have not been able to interrelate the many teaching styles with the various learning styles. We cannot easily determine the many possible alternate paths the student could take based on his achievement at that point. Therefore, we have not been able to make available the "new" technological learning aids.

THE NEW PENCIL

The teaching/learning process which has been in use for the past 500 years has finally reached the point whereby the results are counter-productive. The instructional tools in use prior to the micro-

processor-based learning aids tend to be group orientated with little regard to the individual. Eaton Conant from the University of Oregon has completed a study of the first four years of elementary school and discovered that the amount of time the teacher can give to an individual student is severely limited. Conant found that in a class with 25 to 30 students the average teacher was unable to devote more than 1 to 2 minutes of individualized instruction per student per day. The individualized instruction programs I have worked with all seem to become, sooner or later, self-paced rather than individualized for each student. The success of programs like TICCIT have shown a high degree of success, but at an enormous cost.

We have at our fingertips the tools which will change the delivery system. Notice I said "will" not "could", for these tools are available right now. These are instructional tools such as calculators and learning aids like the Little Professor, Wise Owl, Dataman, the Speak and Spell, and the individual, personal computer.

A SUGGESTED ALTERNATE PROCESS

Several years ago when I first read George B. Leonard's "Education and Ecstasy", I thought how nice it would be to have that kind of delivery system (although I'm sure I did not use those words since I was in the midst of the delivery system, hence I did not recognize it). In his book Leonard states,

"Every child can delight in learning. A new education is already here, thrusting up in spite of every barrier we have been able to build. Why not help it happen?"[1]

We thought then that was so very far into the future — a 1984 kind of future. But 1984 is only five years away and the necessary technology is here now! I would recommend reading Leonard or even reading it again. It is even more relevant now than when it was written in 1968.

"Eventually, however, a computer is needed for each student, just as an English grammar book is needed for each student."

But where can we go from here? We don't want to burn it all down, as they were advocating in the sixties, and start a" over again (although that is a tempting thought). No, rather we must build on the present structure. The present educational establishment must be won over, for if not, the consequence might indeed be grave. What can we see in schools today? That is, not what is in schools today, but what is currently available, right now, to be placed in schools. In order to provide each student with a truly interactive environment, learning aids must be provided much as those materials (books, paper and pencils) are provided for the present passive one. These microprocessor-based learning aids should be provided, either along with or eventually, in place of their present book allotment. In some specialized areas, a simple calculator or a programmable calculator might be provided or even a speech generating device for language arts should be provided. Eventually, however, a computer is needed for each student, just as an English grammar book is needed for each student. Without considering the instructional aspects, I would guess that the first thought relative to this concept is one of cost. This is perfectly natural, especially when one is familiar with the huge cost of computer-based education of only a few years ago. But with the reduced cost of the present micro-processor based learning aids, amortized over about five years, the cost becomes a little more than one hundred dollars per year per student. That certainly compares favorably to the cost of the student's textbook allotment per year.

The student's environment needs to have a number of characteristics which are not now provided in the present delivery system. Among these are random access to any portion of the instructional material. Presently much of the student's time is wasted while waiting for a match between his point in the instruction and the serially presented instruction. Allowing this type of interaction permits the teacher to assist the student as needed rather than to be 'on stage' all the time. Aligned with this is the concept of interactivity. The use of the individualized computer permits this kind of interaction which no teacher can presently match. The courseware of the computer is precise, patient, and always available to the student. Another attribute of the 'new' learning environment is a giant step toward achieving that impossible dream mentioned ealier: individualized instruction. We've all attested to the impossibility of the record keeping task involving 30 to 150 students each on possibly as many different programs. With the existing learning aids the record keeping chore is much simplified. We could keep track of the response and modify the student's program accordingly. The student would be branched to his level and a record kept, informing the teacher of both the student's progress and the validity of the instructional material. This permits the teacher to adjust as appropriate. Also unlike current serial media such as books or films, the courseware could be updated as the need arises. One must also remember that color, motion, and sound to which we have all become accustomed, is very much a part of this environment — and still at the before-mentioned price.

"We must be careful not to think in terms of how does this fit into the curriculum, for the present curriculum itself must be examined."

But what we do need to do in order to achieve this kind of learning environment? The technology already is available. First, we must decide to do something about it; or, I suppose we might decide not to decide. Assuming we decide to look seriously at the present educational delivery system, we must build on what already exists. We must not start with bringing in hardware-calculators or microcomputers. No, we must first start with the content of education, the curriculum itself. We must be careful not to think in terms of how does this fit into the curriculum, for the present curriculum itself must be examined. We must start with the needs of society. The jobs requiring unskilled or semi-skilled workers are rapidly diminishing; the curriculum must reflect that. A more sophisticated instructional content requires a more sophisticated delivery system.

We must involve the practitioners, the teachers, and we must have the support of the administrators. This is not a simple task, for we are dealing with attitudes. The tendency will be to cling to that which is known and with which one is comfortable. We must tread lightly but deliberately. We must define an instructional process which fits the society that presently exists. We must very judiciously look at our present resources. Rather than to seek additional monies, we might better reallocate existing monies and

resources. We have pumped millions of dollars into the system to buy more of the same, i.e., if two aides doesn't help in the classroom then let's have four; if Miss Jones does well with an overhead projector then let's get one for every teacher; if Johnny is successful using the cassette player then let's have all children use the cassette player. Unless you believe in miracles, more of the same does not promise a solution. We have at least thirty years of data to show the extent of the improvement of our educational system using more money without changing the delivery system using more money without changing the delivery system. It is here that the Instructional Development Process mentioned earlier can apply:

DESIGN	A process which meets the needs of students relative to our available resources;
DEVELOP	The appropriate content, produce the necessary material and acquire the needed learning aids;
EVALUATE	The content, the materials, and the process itself.

What if we do not change the system? Fortunately, the human species is very adapable. But what will our society be like while this adaption takes place? More and more workers will find that they are not trained to survive. Even now we are finding business and industry needing to train their new employees in the very basic skills. In many cases, they are finding it necesary to bring them up to literacy. We have hardly begun to exploit the human potential. We know that our students are capable of achieving much more, but the scores are going down. We have at our finger tips the technology to reverse this trend. Not since the advent of the printing press have we had such as opportunity to influence the quality of life. All around us we see evidence that we have, in McLuhan's words, reached the new-tribal or electric age, everywhere, that is, but in the world of education. It might well be that the time has come when we must stop letting schooling interfere with our children's education.

Seymour Paper of M.I.T. sums up our concept of the microprocessor in education with the following.

> *"When we talk about computers in education people ask how we mean to "computerize" subjects. But this is the wrong image. We do not mean to "computerize" anything. Think of the computer as like a pencil. The pencil is always present and has many uses for scribbling, for writing, for arithmetic, for drawing. But we do not talk about "pencilizing" education. The personal computer will be there to be used in many ways like the pencil. Like the pencil, it should serve education, it should never dictate it. And it will serve it as an instrument for writing, for drawing, for doing arithmetic, for composing music and for many other purposes as well. It will be used for fun, for games as well as for deliberate learning."*

Author's Note: This entire paper was composed on the Texas Instruments 990/4 computer and put into final form on a TI Word Processing computer. The computer was used as I would have used a pencil.

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Call For Papers And Participation

AEDS Seventh Annual College Curricula Workshop In Computer Science And Data Processing Orlando, Florida — January 31 and February 1, 1980

AEDS Eleventh Annual Workshop On The Development And Evaluation of Educational Programs In Computer Science And Data Processing St. Louis, Missouri — March 14, 1980

A selected number of short papers will be included in the workshop booklet for the above workshops. Contribuors will be expected to register for one of the workshops, present paper and participate in discussion. A letter of "intent to present" should be sent by December 5, 1979 and an original and two copies of the completed paper must be received before December 29, 1979. Topics of interest include new and existing educational programs in Computer Science, Data Processing, Business with emphasis on computing and information systems especially designed for the undergraduate programs at two-year colleges and four-year colleges which may or may not eventually lead to a B.S. degree.

Contact: Ralph E. Lee
AEDS Workshops
P.O. Box 951
Rolla, MO 65401
(314) 341-4841

MicroComputers: Fad or Function

E. Keith Smelser*

Do you remember how excited educators got with each new innovative teaching tool? Each in its own way assisted in the "improvement" of instruction. Some worked and some didn't, but the fact of the matter was that the individual classroom teacher was the final measure of success for the teaching device. It would be interesting to see how many overhead projectors or self-paced learning machines or any of a host of other devices are still in active use in the classroom today.

Now we're learning about another "teaching tool"...something called a *microcomputing system.* The computer industry says these systems have great capabilities and are the answer to the many problems of public education. But just how potent and how acceptable these devices will be is a question many educators are or should be asking themselves. In other words, are the micros just a fad that will pass in a few years or will they become an integral part of our educational delivery system. In my opinion, microcomputing systems are not another educational tool that will go by the boards in a few years. In fact, their impact on education in the next few years will be significant.

Before we consider these questions any further, let me digress a moment and list some characteristics of an outstanding teacher. We would hope that this is a person who individualizes and personalizes instruction. He/she also keeps detailed records of student progress, prescribes instruction to each student according to his/her (the student's) own needs, plus provides immediate reinforcement to each student. Our super teacher also provides visual and audio stimulation in addition to treating each student fairly and as a unique person. Such a teacher is ready to work early in the day, rarely takes a break if students need help and always stays after school as long as there are tasks to do. If necessary, this teacher is available during evenings and on weekends, too.

One might ask, how do these characteristics relate to micros? In response let me suggest that the technology is nearly in place which would allow educators to relate some of the characteristics of an outstanding teacher to the potential capabilities of microcomputing systems. The missing components of a "complete delivery system" are the development of a comprehensive curricula, the software to run the various curricular applications plus the teacher training and involvement in order to control the teaching process at the classroom level. Many teachers will resist this change to increased involvement of computers in the classroom as long as possible. There are, however, some powerful variables now in motion which will force us to consider them: namely, politics, economics, technology and the private sector. Recognizing now that microcomputing systems will be with us it is important to determine how best to use them. I'd like to suggest some guidelines:

1. *The development of an instructional delivery system which utilizes microcomputing systems should not pose a threat to the teachers.*

   Microcomputers should expand the teachers' capabilities in all areas.

2. *Insist that comprehensive curriculum work for use on micros be developed in an orderly manner.*

   Sporadic, partial development of computer related curriculum by one staff member or by a very small segment of teachers without district coordination has been the rule instead of the exception. I recommend district wide coordination of this development.

3. *Use accepted research techniques to test this method of instructional delivery.*

   If the research is inconclusive, then know enough to temper your involvement. There are already some districts which have purchased units and are developing instructional applications without any apparent long range coordinated research/evaluation project to parallel their development.

4. *Be sure the school board and the district administration make the financial and personnel commitments necessary to support micro systems.*

   Many districts have no "new" money to allocate to th relatively new dimension, s priorities will have to be r examined over the next fe years to allow for these cor mitments.

5. *Inform the community*

   Be sure the public knows wha you are doing (or planning t do) with micros. Chances ar they will be insisting that we ir crease our use of micros sinc many inexpensive, highly effec tive, off-the-shelf devices wil soon be available which wil teach their kids spelling, matl or any of wide variety of sub jects. The public will also be in fluenced by advertising from the private sector.

6. *Inservice, Inservice, Inservice!*

   Over the next few years districts will make commitments to develop instructional applications on micro systems. Be sure to use your district coordinator, the instructional staff, and other knowledgeable teachers and administrators in your district to provide inservice to the professional staff. If local districts want to have a local impact on their instructional delivery system in the next decade, teachers and administrators must raise their awareness in the field of micro computing systems.

7. *Walk before you run*
   a. Design orderly curriculum projects which include micro computers in the delivery system.
   b. Utilize your district staff with assistance from the TIES staff.
   c. Pilot test your projects.
   d. Evaluate
   e. Implement
   f. Evaluate again!

Use of micro computing systems is just beginning in public education. Districts will surely experience more and more pressure to purchase them from all quarters. Be aware that there are many vendors getting into the production of micros and that the hardware we choose today might be replaced by an upgraded version or even a different brand which has more capabilities in just a few years. It is important therefore that the user insist on some compatability between pieces of equipment in order that the software and application programs won't have to go through a major conversion in order to operate on the new equipment. We as educators must *act* now to harness these systems so we won't have to *react* five to 10 years from now.

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Computer Literacy Courses

The project is being conducted by the Special Projects division of the Minnesota Educational Computing Consortium with support from the National Science Foundation (Grant No. Sed 77-18658).

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An important goal of the American educational system has been the development of students who are literate. The concept of being literate has generally been thought of as the possession of sufficient reading, writing and mathematics skills so that the individual can function effectively as a member of society. Bormuth defined reading literacy as "the ability to exhibit all of the behaviors a person needs in order to respond appropriately to all possible reading tasks."[1] Damerell has defined "illiteracy" as being the inability to speak or write "well enough."[2] The word "literacy," therefore, connotes some minimal level of skill that is appropriate for the circumstances in which the individual must operate.

Recently an attempt has been made by many educators to include computer-related knowledge and skills within the scope of "literacy for all citizens." If one accepts the argument that all students need to have sufficient computer knowledge and skill to function as contributing members of a modern technological society, then the question is "what consititutes the sufficient knowledge and skill?" In 1972, the Committee on Computer Education of the Conference Board of the Mathematical Sciences concluded that:

> *It is therefore essential that our educational system be modified in such a way that every student become acquainted with the nature of computers and the current and potential roles which they play in our society.*[3]

The Committee recommended that support be given by the National Science Foundation to the development of at least one secondary school course in "computer literacy." The course would, at a minimum, deal with: a) the ways computers are used, b) the impact that these uses have on individuals and society, c) the capabilities and limitations of computers, and d) the concept of an algorithms and its applications in flowcharting and programming.

Since 1972, the call for "computer literacy" for all students has been heard with increasing frequency. Definitions of what computer literacy is have been more prevalent in the literature. David Moursand offers the following definition:

> Computer literacy refers to a knowledge of the non-technical and low-technical aspects of the capabilities and limitations of computers, and of the social, vocational, and educational implications of computers.[4]

In Great Britain, Lali Makar prefers to call this level of computer knowledge necessary for all "computer awareness." He states that general education is not making students sufficiently "computer aware." He defines computer awareness as:

> ... the possession of sufficient knowledge to enable infrerences, general and social, to be made on the basis of what is seen or heard about computers.[5]

The conceptions of what the sufficient level of knowledge and skills is vary between a general understanding of computer applications and impacts, to a very technical knowledge and skill level. In addition, conceptions of the computer's role in bringing students ot a desired level of knowledge and skills vary. Should the computer be the object of instruction, the deliverer of instruction, or involved at all?

One approach to defining computer literacy is to look at the courses/units that are currently being taught, and that are considered by the teachers of the courses/units to fall within the realm of "computer literacy." In other words, we can define computer literacy content as that which teachers feel is important to teach in a computer literacy unit or course.

Computer Literacy Courses/Units

As a part of a two-year Computer Literacy Project,* we have asked for information on courses/units from around the U.S. that deal with computer literacy. Requests for information from teachers was made through publications, conferences, and letters. In addition, all of the secondary schools that were determined by HumRRO to be Exemplar Institutions because of computer literacy activities were contacted. Responses in the form of course descriptions, course objectives, curriculum guides, or evaluation instruments, were received from about 50 school districts throughout the country. These courses/units were believed by the respondents to fall within the realm of computer literacy. The following types of courses/units were represented in the responses:

1) At the high school level, there are *computer mathematics courses* where mathematics instruction is integrated with computer programming instruction in a separate 9-18 week elective class. Little or no coverage of applications, im-

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pact, or hardware is present.

2) Also at the high school level, *computer programming courses* using BASIC are given for 9-18 week terms. While nearly all of the emphasis is on programming, there is also some discussion of hardware.
3) At the junior high level, but sometimes at the high school level there are 2-4 week "computer literacy" units that deal with computer terminal operation, running library programs, flowcharting, and writing simple programs in BASIC.
4) At the junior high, or upper elementary levels, there are 2-4 week *computer awareness units* that deal with applications, impact, careers, some hardware and software concepts, and possibly the running of a few library programs.
5) Finally, at the 8-10 grade levels there are 9-18 week *computer knowledge courses* that include the areas of applications, impact, hardware and software concepts, running library programs, and writing and running BASIC programs.

It is clear that a wide variety of courses/units were felt by the respondents to be within the confines of computer literacy. Most of the courses fall within the first four categories. Only a handful of respondents described a course that is so often called for in the literature, as noted earlier. This type of course is new to the curriculum. Some school districts have developed such a course with the goal that all students in the district will have taken the course before graduation. A few are well along the road to achieving that goal (For example, Maple Lake, Minnesota, Palo Alto, and San Jose, California). For most students the course is the only computer-related course they take in the secondary schools. For others, it is the foundation of a more technical computer science or programming course at the high school level. The typical content of the more comprehensive computer literacy courses is outlined below.

Content of the Comprehensive Computer Literacy Courses

1) History of Computing
Topics vary from dates, places and people, ancient computing devices to a concentration just on the most recent generations of computers.Some courses seem to place a heavy emphasis on the history of computing.
2) How Computers Work
The structure of computer systems and the function of five major parts are usually covered.
3) Control of Computers
How people communicate with and instruct computers is discussed.
4) What Computers Can and Cannot Do
Capabilities and limitations of computers are topics designed to dispel misconceptions the students may have.
5) Characteristics of Computers
Students are taught that computers are fast, accurate, tireless, and that they need to be instructed.

"The teachers of the courses seem particularly enthusiastic about the courses, which are usually their personal creation."

6) The Effect of Computers on Society
How computers impact individuals, groups, the economy, education, jobs, crime, etc. are common topics. Included is a discussion of both the benefits and dangers of computerization.
7) The Application of Computers
How computers are used in business, government, science, education, etc. are topics covered along with discussions of careers that involve computer use.
8) Computers and the Future
Implications that computers have for the future are discussed. The rapid historical development of computers is extrapolated to the future.
9) Terminal (or Microcomputer) Operation
An introductory unit is often included as an effort to make the student feel at ease at the terminal or microcomputer.
10) System Library Usage
Students run "canned" games and simulation programs. The purpose seems to be to familiarize the students with the communication process, and to provide motivation.
11) Flowcharting
Prior to actual programming in a computer language, students often flowchart procedures such as computing a payroll, preparing for the school day, etc.
12) Programming
Most programming is done in BASIC. The following program statements are the minimum set covered in most courses: PRINT, LET, END, GO TO, IF ... THEN, INPUT, READ, DATA, FOR ... NEXT, DIM, GOSUB, RETURN, REM, and RESTORE.

As is evident from the outline of content above, the students in the comprehensive computer literacy courses investigated are exposed to a wide range of computer-related topics. Many of these courses are well established in the curriculum and are well received by students. The teachers of the courses seem particularly enthusiastic about the courses, which are usually their personal creation. Preliminary indications are that the computer popular, particularly as appropriate course materials become more readily available.

The question remains as to the effect of full computer literacy courses upon students' computer knowledge, skill, and attitudes. Research which compares the effect of such courses with the effect of other types of computer use is currently being conducted by the Computer Literacy Project research team and will be reported during 1980.

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